

APPLICARE
TARGA
CARATTERISTICHE

INSTRUCTION HANDBOOK

PASTOCHEF RTL

*We wish to thank you for the preference granted to us by purchasing one of **CARPIGIANI** machines.*

*To the best guarantee, since 1993 **CARPIGIANI** has submitted its own Quality System to the certification according to the international Standard ISO 9001, nowadays its production has got UNI-EN-ISO 9001:2008 Certified Quality System.*

Moreover, Carpigiani machines comply with following European Directives:

- “Machinery” Directive 2006/42/EC,
- “Low Voltage” Directive 2006/95/EC,
- “EMC” Directive 2004/108/EC,
- “PED” Directive 97/23/EC,
- Regulation 2004/1935/EC relating to “Materials and articles in contact with foodstuffs”

CARPIGIANI

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Edition: 02	Date: 2010/09	Modifications: Sect. 1.2.2 - 2.4.1 - 2.5 - 5 - 5.4 - 5.5 - 5.6
Editor: SB	Verified: SB	Approved: RV

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FOREWORD

INSTRUCTION HANDBOOK

Editing this handbook, it was taken into due account European Community directions on safety standards as well as on free circulation of industrial products within E.C.

PURPOSE

This handbook was conceived taking machine users' needs into due account.

Topics relevant to a correct use of the machine have been analyzed in order to keep unchanged in the long run quality features characterizing **CARPIGIANI** machines all over the world.

A significant part of this handbook refers to the conditions necessary to the machine use and to the necessary procedure during cleanout as well as routine and special maintenance.

Nevertheless, this handbook cannot meet all demands in details. In case of doubts or missing information, please apply to:

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HANDBOOK STRUCTURE

This handbook is divided in sections, chapters and subchapters in order to be consulted more easily.

Section

A section is the part of the handbook identifying a specific topic related to a machine part.

Chapter

A chapter is that part of a section describing an assembly or concept relevant to a machine part.

Subchapter

It is that part of a chapter detailing the specific component of a machine part.

It is necessary that each person involved in the machine operation reads and clearly understands those parts of the handbook of his/her own concern, and particularly:

- The Operator must read the chapters concerning the machine star-up and the operation of machine components.
- A skilled technician involved in the installation, maintenance, repair, etc., of the machine must read all parts of this handbook.

ADDITIONAL DOCUMENTATION

Along with an instruction manual, each machine is supplied also with additional documentation:

- **Part list:** a list of spare parts which is delivered together with the machine for its maintenance.
- **Wiring diagram:** a diagram of wiring connections is placed in the machine.

**Before using the machine read carefully the instruction handbook.
Pay attention to the safety instructions.**



CONVENTIONAL SYMBOLS



CAUTION: ELECTRIC SHOCK DANGER

The staff involved is warned that the non-observance of safety rules in carrying out the operation described may cause an electric shock.



CAUTION: GENERAL HAZARD

The staff involved is warned that the operation described may cause injury if not performed following safety rules.



NOTE

It points out significant information for the staff involved.



WARNINGS

The staff involved is warned that the non-observance of warning may cause loss of data and damage to the machine.



PROTECTIONS

This symbol on the side means that the operator must use personal protection against an implicit risk of accident.



EQUIPOTENTIAL CONNECTION

For connecting all appliances with this type of connection.

Warning: Not intended to be used for protection earth



QUALIFICATION OF THE STAFF

MACHINE OPERATOR

He/she is an unskilled person, who has no specific expertise and can only carry out easy chores, such as the machine operation by means of controls available on the push-button panel, and filling and drawing of products used during operations.



MAINTENANCE ENGINEER

He/she is a skilled engineer for the operation of the machine under normal conditions; he/she is able to carry out interventions on mechanical parts and all adjustments, as well as maintenance and repairs. He/she is qualified for interventions on electrical and refrigeration components.



CARPIGIANI ENGINEER

He/she is a skilled engineer the manufacturer assigned to field interventions for complex jobs under particular conditions or in accordance with agreements made with the machine's owner.

SAFETY

When using industrial equipment and plants, one must be aware of the fact that drive mechanisms (rotary motion), high voltage components, as well as parts subject to high temperatures may cause serious damage to persons and things.

Who is in charge of plant safety must be on the look-out that:

- Any incorrect use or handling shall be avoided;
- Safety devices must neither be removed nor tampered with;
- The machine shall be regularly serviced;
- Only original spare parts are to be used especially as far as those components with safety functions are concerned (ex.: protection microswitches, thermostats);
- Suitable personal protective equipment is worn.

To achieve the above, the following is necessary:

- At the working place an instruction manual relevant to the machine should be available;
- Such documentation must be carefully read and requirements must consequently be met;
- Only adequately skilled personnel should be assigned to electrical equipment;
- Be on the look out that no technician will ever carry out interventions outside his own knowledge and responsibility sphere.

QUALIFICATION OF THE STAFF

Staff attached to the machine can be distinguished according to training and responsibility as follows:

OPERATOR

- A person who has not necessarily a high technical knowledge, just trained for ordinary operation of the machine, such as: startup, stop, filling, basic maintenance (cleanout, simple blocking, instrumentation checkings, etc.).

SKILLED ENGINEER

- A person engaged on more complicated operations of installation, maintenance, repairs, etc.

IMPORTANT!

One must be on the look-out that the staff does not carry out any operation outside its own sphere of knowledge and responsibility.

NOTE:

*According to the standard at present in force, a **SKILLED ENGINEER** is who, thanks to:*

- *training, experience and education,*
- *knowledge of rules, prescriptions and interventions on accident prevention,*
- *knowledge of machine operating conditions,*

is able to realize and avoid any danger and has also been allowed by the person in charge of plant safety to carry out all kinds of interventions.

WARNING

When installing the machine, insert a differential magnetothermal protection switch on all poles of the line, adequately sized to the absorption power shown on machine data plate and with contact opening of 3 mm at least.

- Never put your hand into the machine, alike during production and cleaning operations. Before carrying out any maintenance operation, make sure that the machine is in “STOP” position and main switch has been cut out.
- It is forbidden to wash the machine by means of a bolt of water under pressure.
- It is forbidden to remove panels in order to reach the machine inside before having disconnected the machine.
- **CARPIGIANI** is not responsible for any accident that might happen during operation, cleaning and/or servicing of its units, if this warning has not been fully complied with.






1. GENERAL INFORMATION

1.1 GENERAL INFORMATION

1.1.1 Manufacturer's identification data

The machine has a data plate carrying manufacturer data, machine type and serial number, assigned when it is manufactured.

Copy of machine data plate to be found on first page of this handbook.

A		B		F		G	
 ANZOLA EMILIA - BOLOGNA - ITALY							
Matr.				Cod.			
 100089654588-4							
		V		Hz		kW	
		A					
Gas		kg					
							
C		D		E		H	
						I	

Legend:

- A= Serial number
- B= Machine type
- C= Voltage
- D= Main-switch
amperometric value
- E= Gas type and weight
- F= Machine code
- G= Condensation
- H= Frequency
- I= Power input

1.1.2 Client/user's identification data

CLIENT:.....
 ADDRESS:.....
 TELEPHONE:.....
 Machine serial number:.....
 Machine delivered on:.....
 Instr. handbook delivered on:.....

1.1.3 Information about service

All operations of routine maintenance are described in section "Maintenance" of this handbook; any further operation requiring radical interventions on the machine must be agreed with the manufacturer, who will also examine the possibility of a direct action on the spot.

1.1.4 Information to the user

- The manufacturer of the machine here described is at user's disposal for any explanation and information about the machine operation.
- In case of need, the interlocutor is the distributor being present in user's country, or the manufacturer if no distributor is in that market.
- Manufacturer's service department is at clients' disposal for any information about operation, and requests of spare parts and service.





1.2 INFORMATION ABOUT THE MACHINE

1.2.1 General information

PASTOCHEF RTL is an electronic machine to produce, pasteurize and store custards for fillings and coatings, chocolate hardening for pralines, jams, and doughs for biscuits and cakes, "mandorlato" (almond cake) and fruit jellies, ice cream and shake mixes, bechamels and sauces.

The machine is provided with a tank with an exclusive system for indirect heating, which can reach high cooking temperatures.

At the inside a beater for mixing of hard and liquid creams is lodged and can run according to an uninterrupted or alternate beating.

Last, **PASTOCHEF RTL** is provided with a cooling system to complete the pasteurization cycle of products under process, thus allowing them to be stored in the machine, when the cycle ends.

CARPIGIANI recommends to always use high quality ingredients for confectionery products in order to satisfy your customers, even the hardest-to-please ones.

Any saving made to the prejudice of quality will surely turn into a loss much bigger than the saving itself.

Bearing in mind the above statements, please take heed of the following suggestions:

- Choose high quality natural ingredients or buy them from reliable companies.
- Closely follow instructions given by your supplier.
- Do not alter your supplier's recipes, by adding, for instance, water or sugar.
- Taste your product before serving and start selling it if only entirely satisfactory.
- Make sure your staff always keeps the machine clean.
- Have your machine always serviced by companies authorized by **CARPIGIANI**.



DANGER OF THERMAL NATURE

By opening the cover of the tank containing high temperature product, the operator runs the risk of being caught in hot steam.

DANGER

Act with utmost care and use proper protections before opening the tank cover.

1.2.2 Technical information

MODEL	Custard			Chocolate		Electric power*			Instal- led power	Conden- ser	Water con- sumption	Dimensions			Wei- ght
	Prod. in 2 hours	Tank capacity		Tank capacity											
		Kg.	Min. Li- tres	Max. Li- tres	Min. Kg.	Max. Kg.	Volt	Cycles	Ph		kW	litres/ hour	Width mm (A)	Depth mm (B)	Height mm (C)
PASTOCHEF RTL 18	15	7	15	5	12,5	400	50	3	2,1	Water**	120	450	614	1110	150
PASTOCHEF RTL 32	30	15	30	7,5	25	400	50	3	4	Water**	280	658	716	1110	198
PASTOCHEF RTL 55	50	25	50	10	40	400	50	3	5,6	Water**	410	658	720	1190	251
PASTOCHEF RTL 32 A-EFF	30	15	30	7,5	25	400	50	3	4	Water	280	685	716	1110	198

* Other voltages and cycles available

** Models also available in aircooled execution

Performances refer to a room temperature of 25°C and to 20°C temperature of condensing water.

1.2.3 Location of the machine groups

Caption:

- 1 Tank with cover
- 2 Control panel
- 3 Dispensing spigot
- 4 Shoot
- 5 Cover

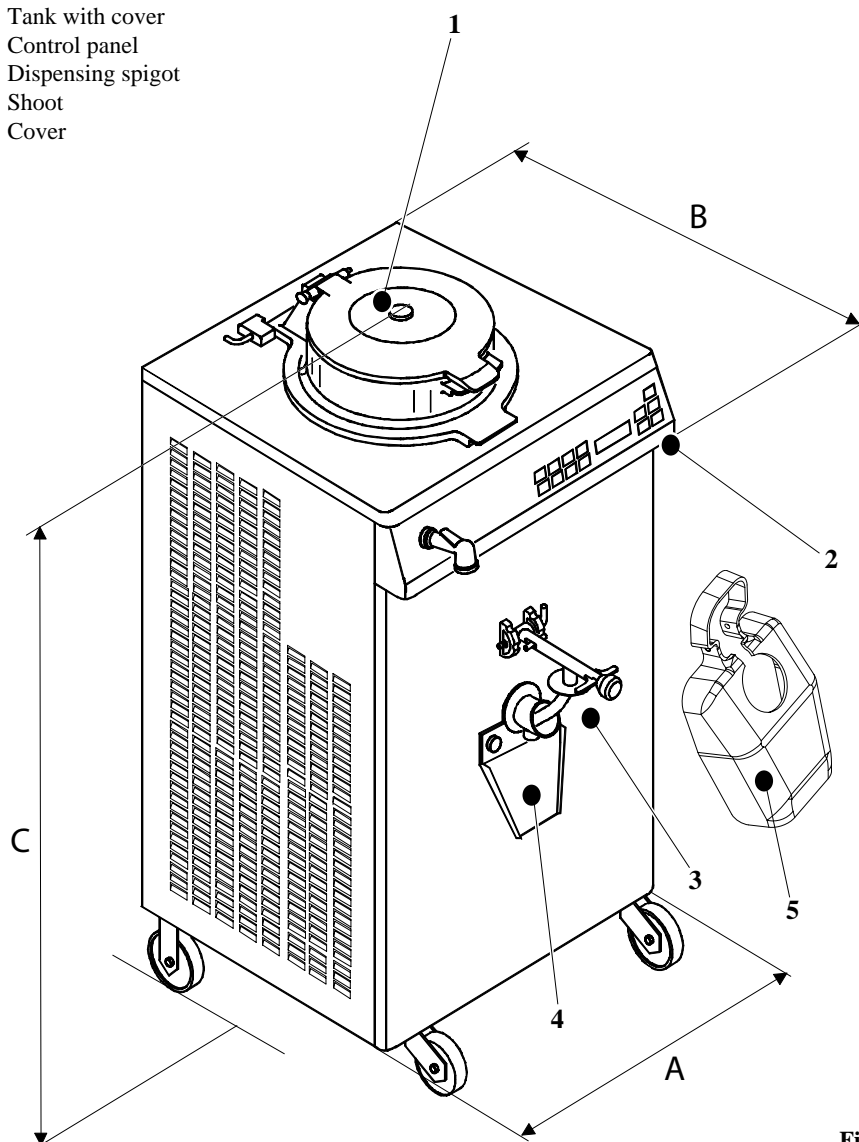


Fig. 1

1.3 INTENDED USE

PASTOCHEF RTL models 18, 32, 55 must only be used conforming with contents of paragraph 1.2.1 "General Information", within the functional limits hereunder reported:

Voltage:	±10%
Air min. temperature:	10°C
Air max. temperature:	43°C
Water min. temperature:	10°C
Water max. temperature:	30°C
Water min. pressure:	0,1 MPa (1 bar)
Water max. pressure:	0,8 MPa (8 bar)
Max air relative humidity:	85%

- This machine has been designed for its use in rooms being not subject to explosion-proof laws; its use is thus bound to complying rooms and normal atmosphere.
- The machine must not be used in the open air, at the risk of rain.
- The machine must be used in lying flat and with castors locks engaged.
- The machine must only be used by the operators.
- The machine may not be washed with any direct water spray.

1.4 NOISE

The continuous level of acoustic radiation pressure, which has been weighed and called A on working place, turns to be lower than 70 dB(A), both by aircooled and by watercooled units.

1.5 STORING A MACHINE

The machine must be stored in a dry and dump-free place.

Before storing the machine, wrap it in a cloth in order to protect it against dust and else.

1.6 DISPOSAL OF PACKING STUFFS

When opening the packing crate, divide packing stuffs per type and get rid of them according to laws in force in machine installation country.

1.7 WEEE (Waste Electrical and Electronic Equipment)



In conformity with the European Directives 2006/66/EC, on batteries and accumulators and waste batteries and accumulators, and 2002/96/EC, also known as WEEE, the presence of the symbol on the side of the product or packaging means that the product must not be disposed of with normal urban waste. Instead, it is the user's responsibility to dispose of this product by returning it to a collection point designated for the recycling of electrical and electronic equipment waste. Separate collection of this waste helps to optimize the recovery and recycling of any reclaimable materials and also reduces the impact on human health and the environment. For more information concerning the correct disposal of this product, please contact your local authority or the retailer where this product was purchased.

2. INSTALLATION



2.1 ROOM NECESSARY TO THE MACHINE USE

The machine may only run indoors.

The machine must be installed in lying flat, so that air can freely circulate all around.

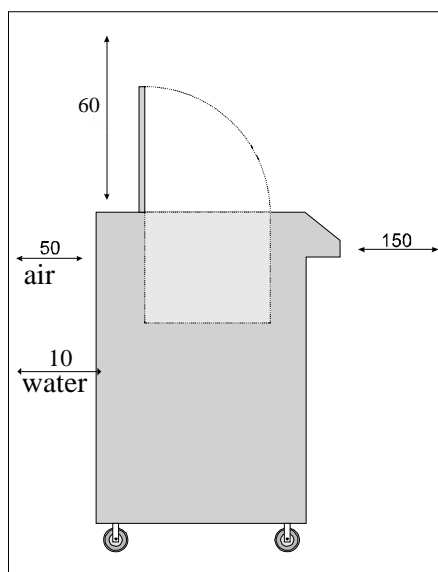


Fig. 2

Rooms for the approach to the machine must be left free in order to enable the operator to act without constraint and also to immediately leave working area, if need be.

The minimum approach room to working area should be at least 150 cm in consideration of space taken by opened doors.

2.2 MACHINE LOCATION

The machine is provided with wheels for its easy location; two castors are provided with mechanical locks, which once engaged, lock the wheels and so keep the machine standstill.

2.3 MACHINES WITH AIRCOOLED CONDENSER

Machines with aircooled condenser must be installed no closer than 50 cm to any wall in order to allow free air circulation around the condenser.

Frequently clean the floor beneath and near to the machine, to avoid that paper and else obstruct a regular airflow. Further, condenser needs to be cleaned monthly, so eliminating dust, paper and what else can obstruct it and affect a regular operation.

NOTE

An insufficient air circulation affects operation and output capacity of the machine.

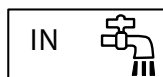


2.3.1 Water supply connection for wash

The machine must be connected to running water which pressure must not be higher than 0,8 MPa (8 bar).

By aircooled machines, water connection for drinking water (for machine wash), marked by the plate herebelow, is placed under the machine.

Connect this tube to drinkable water, only.



For an easy cleaning, we advise you to install a shut-off valve between machine and warm water used in laboratory.



2.4 MACHINES WITH WATER COOLED CONDENSER

The machine must be connected to the water supply respecting the applicable national requirements; moreover the water mains pressure must not exceed 0.8 MPa (8 bar).
By watercooled machines wash water and gas cooling connections are on the back panel. There are three connections aligned on the same vertical.
Watercooled machines can only run when connecting them to running water supply or to cooling towers.
Water must have a pressure of 0,1 MPa (1bar) at least, and a deliver at least equal to the estimated hourly consumption.
Connect inlet pipe marked by the plate "Entrata Acqua" (water inlet) to water supply, installing a shut-off valve and the outlet pipe marked by "Uscita Acqua" (water outlet) to a drain pipe, installing a shut-off valve, too.

NOTE
We recommend to use rubberized canvas tubes with a working pressure up to 0,8 MPa (8 bar).

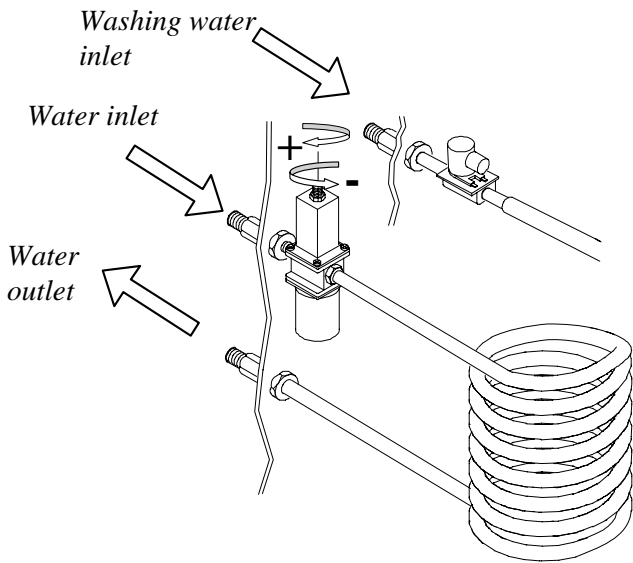


Fig. 3

2.4.1 Water valve adjustment

IMPORTANT
If water valve needs to be reset, such an operation must be carried out by skilled personnel, only.
Set water valve so that, with machine off no water comes out and lukeawarm water flows out when on.
Water consumption
Estimated water consumption per hour is shown in the table.

NOTE:
Water consumption increases if temperature of entering water is above 20°C.

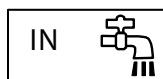
Model	Water consumption litres/hour per cooling cycle
Pastochef RTL 18	120
Pastochef RTL 32	280
Pastochef RTL 55	410
Pastochef RTL 32 A-EFF	280

ATTENTION
Do not leave the machine in a room with temperature below 0°C without first draining water from condenser (see Section 5).



2.4.2 Water supply connection for machine wash

Alike aircooled and watercooled machines have been provided with a separate inlet pipe for washing water. Only has drinking water to be connected to this pipe, which is marked by the plate shown herebelow.



To make clean out easy, we recommend to connect warm water used in your laboratory directly to wash pipe, installing a shut-off valve.

2.5 ELECTRICAL CONNECTION

Before connecting the machine to the mains, check that the voltage is the same as the one stated on its plate.

Power cable by machines on 400 V, 50 Hz, threephase is made up of 5 wires: 3 wires for phases, the blue one for neutral and the green/yellow one for earthing.

By machines with other voltages, power cable is made up of 4 wires, without the neutral one. Between the machine and the mains, insert a magnetothermic differential sectioning switch properly dimensioned to the input required, and having a contact opening of 3 mm, at least.

Model	Installed power kW
Pastochef RTL 18	2,1
Pastochef RTL 32	4
Pastochef RTL 55	5,6
Pastochef RTL 32 A-EFF	4

IMPORTANT

Yellow/green ground wire must be connected to a good ground plate.

2.5.1 Replacing the input cable

Should the main cable of the machine be damaged, it needs to be replaced immediately through a cable with similar features. Replacement shall be carried out by skilled technicians, only.

Rotation direction

Direction of beater rotation is shown on the plastic cap covering the beater on its upper part.

Reversal of rotation

If the rotation direction is wrong, reverse it by interchanging two of the three leads coming from the circuit breaker.

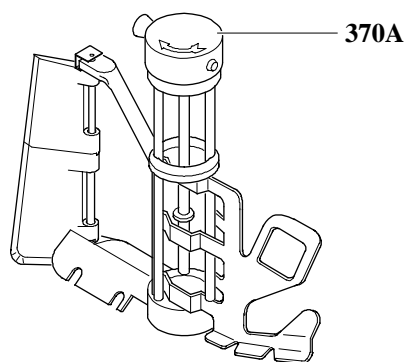


Fig. 4

2.5.2 Equipotential connection

A equipotential connection point is present on the back

of the machine and this is marked with the symbol:



WARNING:

Not intended to be used for protection earth





2.6 REFILLING

Motor installed in the machine is of the type with lubrication for life; no action of checking/replacing or topping up is necessary.

Gas filling necessary to the freezing system is carried out at **CARPIGIANI** works during machine postproduction testing.

If a gas addition happens to be made, this must be carried out by skilled technicians, only, who can also find out trouble origin.

2.7 MACHINE TESTING



A postproduction test of the machine is carried out at Carpigiani premises; Operation and output functionality of the machine are thoroughly tested.

Machine test at end user's must be carried out by skilled technicians or by one of **CARPIGIANI** engineers.

After the machine positioning and correct connections, also carry out all operations necessary to functional check and test of the machine.

2.8 MOVEMENT - TRANSPORT



Should the machine need be moved from its original location, it is necessary to turn to skilled personnel.

3. DIRECTIONS FOR USE

3.1 MACHINE SAFETY WARNINGS

When using industrial equipment and plants, one must be aware of the fact that drive mechanisms (rotary motion), high voltage components, as well as parts subject to high temperatures may cause serious damages to persons and things.

Who is in charge of plant safety must be on the look-out that

- An incorrect use or handling is avoided
- Safety devices must neither be removed nor tampered
- That maintenance interventions are performed at regular intervals
- Only original spare parts are to be used especially as far as those components with safety functions are concerned (ex.: protection microswitches, thermostats)
- Suitable personal protective equipment is worn.

To achieve the above, the following is necessary:

- At working place an instruction manual relevant to the machine should be available.
- Such documentation must be carefully read and regulations must consequently be followed.
- Only adequately skilled personnel will have to be assigned to electrical equipment.



3.2 MACHINE CONFIGURATION

The machine consists of a transmission of movement for beater assembly, a heating and cooling system with aircooled or watercooled condenser.

The product is prepared by pouring a mix into the tank and starting the production cycle, while referring to minimum and maximum quantities reported in Section 1, table on page 10.

WARNING

The mix entering the tank must remain below the plastic cap of the mixer.

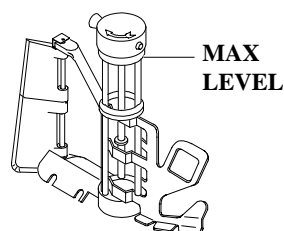


Fig. 5

As the machine is provided with specific programs for the preparation of various products, one must set the program relevant to the selected product before starting the cycle.

When the cycle ends, the product can be drawn out from the special spigot.

The spigot can be adjusted in relation to the product to be taken out.

There are four positions marked by notches having following numbers: **0,1,2,3**.

If the product to be taken out is thick or it is a custard, the spigot pin A shall be put to notch **3**.

For fluid products, adjust the pin to notch **2**.

Closing position

To close the dispensing spigot, adjust pin A to notch **0**.

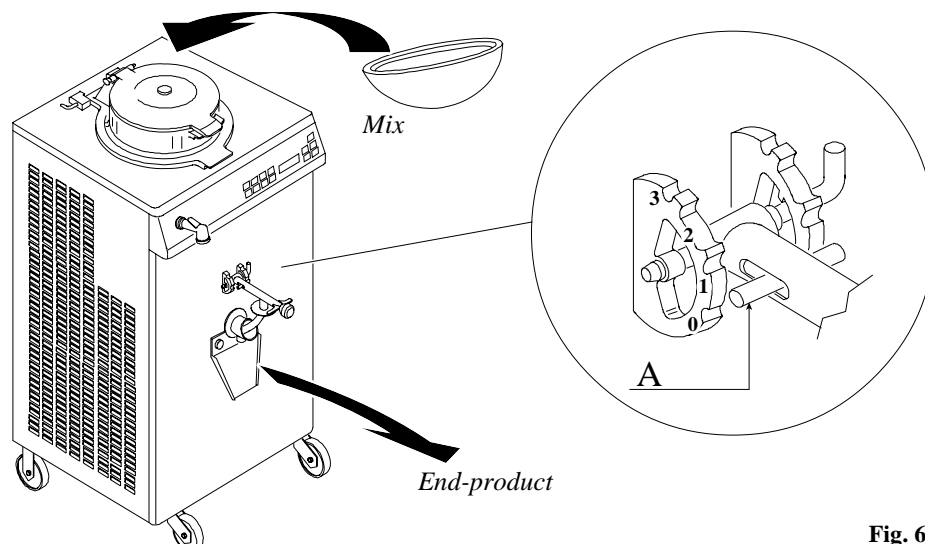


Fig. 6

3.3 CONTROLS

3.3.1 Push button panel

For a correct use of the commands on the electronic control units, press on symbol or in the middle of the button.



Fig. 7

3.3.2 Functions

Function activation LED

When a LED, located at the top left of every button, lights up, this indicates that the function corresponding to the symbol given next to the LED has been activated.



DISPLAY:

The Pastochef RTL is equipped with an LCD alphanumeric display which displays a range of messages when it is turned on and while being used. In STOP mode the display shows the time in the top-left area, the date in the top-right area, "Pastochef" in the middle of the display, and the model number on the last row.

NOTE:

While allowing the product to sit, after 3 minutes from the last press of a button, the display is no longer lit and goes into standby. Press the OK button to re-activate it.



STOP button:

When the STOP function is selected, the corresponding LED is turned on. The other functions may be accessed from the STOP state. In order to modify or halt any automatic or manual production cycle, press STOP; the display then shows

Stop?	(STOP)
Continue?	(OK)

If the OK button is pressed, the machine restarts the automatic or manual production cycle where it had stopped previously; if the STOP button is pressed, the machine returns to the STOP state. It is possible to view the events by keeping the STOP button pressed and using the arrow keys.



Water Dispenser button:

When pressed at any time, it activates the electro-valve which dispenses water through the nozzle at the front of the machine. Dispensing is stopped either by pressing the same button again, or by waiting for 3 minutes, or by pressing the STOP button.



OK button:

When pressed whilst visualising menus, the OK key starts the process selected. This key is used when running programs, to confirm the insertion of ingredients or the continuation of a process after the STOP key has been pressed.

**INCREASE button:**

Whilst inside any menu, this key is used to select the desired process (selected by the asterisk at the side of the cycle).

Furthermore, it increases the values that can be modified in the functions where permitted. For example; the modification of the process temperature.

**DECREASE button:**

This decreases the values that can be edited for those functions where this is permitted, e.g., to change the temperature of the production process.

While automatic production is in progress, holding down this key makes it possible to perform an AUTOSSETUP for the single cycle, i.e., for the current production process, the Temperature, Duration and Speed values are set back to default values.

If this key is held down in STOP mode, an AUTOSSETUP is carried out for all programs. This key is also used to reset alarm messages.

**ESTRACCTION/MANUAL FUNCTIONS button:****ESTRACCTION FUNCTION**

Upon pressing the BEATING button at the end of the automatic cycles, the ON-1 speed is activated for 30 secs in order to allow the product to be collected. At the same time, the INCREMENT and DECREMENT buttons are enabled so that the ON-1 or ON-2 beating may be selected.


MANUAL FUNCTIONS

Upon pressing the Beating button from the Stop state, the following menu is displayed:

* MIXING
HEATING
COOLING

and the Beating, **INCREMENT**, **DECREMENT** and **OK**. LEDs light up.

With the **INCREMENT** and **DECREMENT** buttons one may select the desired type of washing (the selected cycle is marked by an asterisk next to it).

Press the OK button  to activate the desired manual program.

MIXING:

MIXING	
Timer	00:00:00
* Speed	ON-1
	+04°



The display shows:

- the current function on the first row;
- a timer, if applicable, on the second row;
- the selected speed on the third row;
- the product temperature on the fourth row.

In this function the slow beater motor is activated.

It is possible to modify the beater speed and to set a timer.



In order to modify the Beater Speed:

- use the Increment and Decrement buttons to position the asterisk next to the "Speed" heading
- press the OK button ; the asterisk blinks to indicate that the speed may be modified
- modify the speed using the Increment and Decrement buttons. Beating may be slow and continuous (ON-1), slow and intermittent (ON/OFF-1), fast and continuous (ON-2), fast and intermittent (ON/OFF-2), or not selected (OFF)
- press the OK button again  or wait 10 seconds to exit the modification screen; the asterisk will then stop blinking.




The intermittent beating times may also be modified by the user by entering the User Programming mode (see paragraph on USER PROGRAMMING).


To set the Timer:

- position the asterisk next to the “Timer” sign using the Increment and Decrement buttons
- press the OK  button; the asterisk blinks to indicate that the time setting may be modified
- modify the timer setting using the Increment and Decrement buttons; the increment and decrement steps are in 1- minute intervals for timer settings less than one hour, and in 1-hour intervals for settings greater than one hour. When the timer elapses the machine emits a sound for a few seconds.
- press the OK  button again to exit the modification screen or wait 10 seconds; the asterisk stops blinking.

To activate another manual function:

- press the  button. The display shows:

MIXING
* Heating
Cooling

- Select the manual function by using the Increment and Decrement buttons and positioning the asterisk next to it; pressing the OK  button to activate it, or press the Manual Functions button again to return to beating mode.

HEATING:

After selecting this function, the machine starts to heat the product and the display shows the following:

HEATING
Timer 00:00:00
Speed ON-1
* +85°C..... +04°C

The display shows:

- the current function on the first row;
- a timer, if applicable, on the second row;
- the selected speed on the third row;
- on the fourth row: the target temperature to the left, the product temperature to the right, and in the middle the increasing temperature bar.

Once the set temperature has been reached, the heating is deactivated, the beater remains in motion and the buzzer rings intermittently for a few seconds.



At this stage the product temperature reading is undetermined.

After a few minutes (see the “Timer Backlight” User Programming step) the display is no longer lit.



It is possible to modify the set temperature, beater speed and to set a timer.



To modify the set temperature:

- position the asterisk next to the Set Temperature;
- press the  button; the asterisk starts to blink to indicate that it's possible to modify the setting;
- modify the Set value by using the increment and decrement buttons;
- press the OK  button again or wait 10 seconds to exit the modification screen; the asterisk stops blinking.

In order to modify the Beater Speed:



- use the Increment and Decrement buttons to position the asterisk next to the "Speed" heading
- press the OK button ; the asterisk blinks to indicate that the speed may be modified
- modify the speed using the Increment and Decrement buttons. Beating may be slow and continuous (ON-1), slow and intermittent (ON/OFF-1), fast and continuous (ON-2), fast and intermittent (ON/OFF-2), or not selected (OFF)
- press the OK button again  or wait 10 seconds to exit the modification screen; the asterisk will then stop blinking.

NOTE:

The intermittent beating times may also be modified by the user by entering the User Programming mode (see USER PROGRAMMING paragraph).



To set the Timer:

- position the asterisk next to the "Timer" sign using the Increment and Decrement buttons
- press the OK  button; the asterisk blinks to indicate that the time setting may be modified
- modify the timer setting using the Increment and Decrement buttons; the increment and decrement steps are in 1- minute intervals for timer settings less than one hour, and in 1-hour intervals for settings greater than one hour. When the timer elapses the machine emits a sound for a few seconds.
- press the OK  button again to exit the modification screen or wait 10 seconds; the asterisk stops blinking.

To activate another manual function:

- press the  button;
- The display then shows:


HEATING
* Cooling
Mixing

- select the manual function with the arrow keys by positioning the asterisk next to the function and pressing the OK button to activate it, or to return to beating mode press the Manual Function button once again.



Cooling:

Upon selecting this function the machine starts to cool the product and the display shows the following:

COOLING
Timer 00:00:00
Speed ON-1
* +04°C  +52°C

The display shows:



- the current function on the first row;
- a timer, if applicable, on the second row;
- the set speed on the third row;
- on the fourth row: the target temperature to the left, the product temperature to the right, and in the middle the decreasing temperature curve.

Once the set temperature (Set) has been reached, the buzzer rings and cooling is deactivated.



The mix temperature reading is undetermined at this stage. After a few minutes (see "Timer Backlight" User Programming step) the display is no longer lit.

It is possible to modify the set temperature, beater speed and to set a timer.

To modify the set temperature:

- position the asterisk next to the Set Temperature;
- press the  button; the asterisk starts to blink to indicate that it's possible to modify the setting;
- modify the Set value by using the increment and decrement buttons;
- press the OK  button again or wait 10 seconds to exit the modification screen; the asterisk stops blinking.



In order to modify the Beater Speed:

- use the Increment and Decrement buttons to position the asterisk next to the "Speed" heading
- press the OK button ; the asterisk blinks to indicate that the speed may be modified
- modify the speed using the Increment and Decrement buttons. Beating may be slow and continuous (ON-1), slow and intermittent (ON/OFF-1), fast and continuous (ON-2), fast and intermittent (ON/OFF-2), or not selected (OFF)
- press the OK button again  or wait 10 seconds to exit the modification screen; the asterisk will then stop blinking.

NOTE:

The intermittent beating times may also be modified by the user by entering the User Programming mode (see USER PROGRAMMING paragraph).

To set the Timer:


- position the asterisk next to the "Timer" sign using the Increment and Decrement buttons
- press the OK  button; the asterisk blinks to indicate that the time setting may be modified
- modify the timer setting using the Increment and Decrement buttons; the increment and decrement steps are in 1- minute intervals for timer settings less than one hour, and in 1-hour intervals for settings greater than one hour. When the timer elapses the machine emits a sound for a few seconds.
- press the OK  button again to exit the modification screen or wait 10 seconds; the asterisk stops blinking.

To activate another manual function:

- press the  button;
- The display then shows:

HEATING
* Cooling
Mixing



- select the manual function with the arrow keys by positioning the asterisk next to the function and pressing the OK  button to activate it, or to return to beating mode press the Manual Function button once again.



CUSTARD button

When the Custard button is pressed, the menu appears.

The cycles are as follows:

- Custard Speed;
- Custard Classic;
- Custard Excellent;
- Choc. Custard;
- Zabaione Custard;
- Lemon Cream;
- Bavarian Cream;
- Cream Pudding;
- Tiramisu';
- Choc. Pudding;
- Creamy Fruit;
- Jam;
- Pochee Fruit;
- Fruit Topping;
- Fruit Jellies;
- Gelatine for cakes;
- Syrup for dessert;
- Custard storage.



ICE-CREAM button

After pressing the Ice-Cream button, the menu appears.

The cycles are:

- High Pasteurization;
- Mix Pasteurization;
- Semifreddo base;
- Mix storage.



CHOCOLATE button

After pressing the Chocolate button, the menu appears.

The cycles are:

- Bitter Choc.Harden;
- Milk Choc.Harden;
- White Choc.Harden;
- Gianduia Harden;
- Temp.Chocol.Speed;
- Ganache Cream;
- Chocolate Sauce;
- Chocolate Spread;
- Harden.storage.



SPECIALTIES button

After pressing the Specialties button, the menu appears.

The cycles are:

- Cream Puffs;
- Bruttimabuoni;
- Honey Almond Nougat;
- Petit Four;
- Butter Cookies;
- Frittelle;
- Yoghourt.

**GASTRONOMY button**

After pressing the Gastronomy button, the menu appears.

The cycles are:

- Gastron. Cream;
- Bechamel;
- Salty Shortbread;
- Polenta;
- Italian Ragout;
- Rice;
- Fresh Cheese.

**USER PROGRAM button**

After pressing the User Program button, a menu appears with 5 programs which may be configured by the user.

3.4 AUTOMATIC PROGRAMS

The **PASTOCHEF RTL** has 5 types of automatic programs.

- **CUSTARDS:** with 18 automatic programs
- **ICE-CREAM:** with 4 automatic programs
- **CHOCOLATE:** with 9 automatic programs
- **SPECIALTY:** with 7 automatic programs
- **GASTRONOMY:** with 7 automatic programs
- **USER:** with 5 programs which may be customized by the user.

3.4.1 Procedure to start an automatic program

- Press the button which corresponds to the program which one wishes to start:

- Custards ;
- Ice-cream ;
- Chocolate ;
- Specialty ;
- Gastronomy .

- By pressing for example the Ice-Cream button, a menu will appear with the following cycles:

- High Pasteurization;
- Mix Pasteurization;
- Semifreddo base;
- Mix storage;

- Position the asterisk next to the cycle to be executed using the Increment and Decrement buttons.

- Press the OK button to start the cycle, for example Mix Pasteurization.

The display shows:

MIX PASTEURIZAT.		
Solids+Milk		OK?
Mixing		
+00°C	00:01:59	+23

The display then shows:

- the current program on the first row;
- the ingredient which should be added during the current phase, followed by "OK?". By pressing OK the ingredient addition is confirmed and the question mark disappears;
- the current phase (or additional information) on the third row;
- on the fourth row: the target temperature to the left, the product temperature to the right, and in the middle either the increasing or decreasing temperature curve, or the date if paused.

The various Program parameter modification screens can be viewed by pressing the **Ice-Cream** button again. The parameters which may be modified may be changed using the Increment and Decrement buttons.

The first time the **Ice-Cream** button is pressed, the following message is displayed:

MIX PASTEURIZAT.	
Solids+Milk	OK?
Mixing	
Temperature	+000

The target temperature may be modified on this screen (where applicable) using the Increment and Decrement buttons.

The next time the **Ice-cream** button is pressed the display will show the following:

MIX PASTEURIZAT.	
Solids+Milk	OK?
Mixing	
Speed	ON-2

The beater speed may be modified on this screen (where applicable) using the Increment and Decrement buttons (continuous fast speed is shown in the figure).

The third time the **Ice-cream** button is pressed the display will show the following:

CHOC. PASTEURIZAT.	
Cream	OK?
Heating	
Timer	00:02:00

A pause duration (where applicable) may be modified on this screen using the **INCREMENT** and **DECREMENT** buttons.

From the parameter modification screens users return automatically to the main menu after 10 seconds of inactivity or by again pressing the Ice-Cream button.

IMPORTANT

- When the arrow LEDs light up when accessing the parameter modification screens during any cycle phase, HEATING, COOLING, PAUSE, this means that the value may be modified.
- Each phase has independent time and temperature parameters so that, if for example a program envisages cooling at 4° followed by a pause at 4° and one wishes to cool and then keep the product at 3°, one must modify the set temperature for the cooling phase as well as for the pause phase.
- To skip a phase during a cycle, press the INCREMENT button for a few seconds.
- During a cycle, at the end of each HEATING, COOLING, PAUSE, etc phase, the buzzer will ring for a few seconds.
- **At the end of the cycle the display shows the increasing STORAGE time or, if the product is to be used immediately, the 'Estraction!' message.**
- **In the event of power loss the STORAGE time restarts from 0.**






IMPORTANT

If the program is modified during cycle execution, the modified values are saved. If the same program is executed again, the updated values will be used.

EXTRACTION

To make it easier to remove the product, it is possible to force the beater by pressing the  button at the end of any cycle.

The display then shows

MIX PASTEURIZAT.		
OK	Mix	Pasteurizat.
Extraction		
Speed	ON-1	

By using the INCREMENT and DECREMENT buttons it is possible to select the ON-1 or ON-2 speed, which will remain set for 30 seconds. After 30 seconds the machine continues with the current function.

STORAGE

If thermostat-controlled storage is envisaged at the end of the cycle, it is possible to vary the beating by accessing the parameter modification screen and modifying the SPEED parameter.

3.4.2 Restoring the original program settings


To restore the original automatic program settings, keep the DECREMENT button pressed for a few seconds during program execution.

The temperature and duration of all program phases shall thus be reset to their original values.

3.5 “CUSTARD” PROGRAMS


The electronic memory stores **18 basic programs**, which are fully automatic and are described below.

3.5.1 Program n° 1 Custard Speed


1. Add "*Yolk+Sugar*".
Beat at speed CONTINUOUS FAST (ON-2) for 5' (may be set from 5' to 10').
2. Add "*Thickner*".
Beat at speed CONTINUOUS FAST (ON-2).
3. Add "*Milk*".
Heat up to 85°C (may be set from 70° to 105°) with CONTINUOUS SLOW BEATING (ON-1).
4. Add "*1/2Sug+WhipYolk*".
Pause for 1' (may be set from 1' to 1h) at 85°C with CONTINUOUS SLOW BEATING (ON-1).
5. Cool for 3' (may be set from 1' to 7') with CONTINUOUS FAST BEATING (ON-2).
6. From this point onwards it is possible to enable product extraction by pressing the  button.
Cool to 10°C (may be set from 4° to 15°) at speed INTERMITTENT SLOW BEATING (ON/OFF-1).
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
7. Cool to 4°C (may be set from 1° to 4°) without beating (OFF).
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
8. Store at 4°C (may be set from 1° to 4°) without beating (OFF) for an indefinite amount of time.
It is possible to set any type of beating.



3.5.2 Program n° 2 Custard Classic


1. Add "*Milk*".
Heat up to 60°C (may be set from 60° to 80°) with CONTINUOUS FAST BEATING (ON-2).
2. Add "*1/2 Sugar+Flour*".
Heat up to 95°C (may be set from 85° to 105°) with CONTINUOUS FAST BEATING (ON-2).
3. Add "*1/2 Sug+WhipYolk*".
Pause at 95°C (may be set from 85° to 105°) with CONTINUOUS FAST BEATING (ON-2) for 1' (may be set from 30" to 1').
4. Heat up to 95°C (may be set from 85° to 105°) with CONTINUOUS FAST BEATING (ON-2).
5. Pause at 95°C (may be set from 85° to 105°) with CONTINUOUS FAST BEATING (ON-2) for 3' (may be set from 1' to 7').
6. From this point onwards it is possible to enable product extraction by pressing the  button.
Cool to 25°C (may be set from 15° to 30°) with INTERMITTENT SLOW BEATING (ON/OFF-1). It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
7. Cool to 10°C (may be set from 4° to 15°) with INTERMITTENT SLOW BEATING (ON/OFF-1). The INTERMITTENT Beating times are those set in the Cyclic Timer ON and Cyclic Timer OFF programming steps.
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
8. Cool to 4°C (may be set from 1° to 4°) without beating (OFF).
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
9. Store at 4°C (may be set from 1° to 4°) without beating (OFF) for an indefinite amount of time.
It is possible to set any type of beating.

3.5.3 Program n° 3 Custard Excellent


1. Add "*Yolk+Sugar*".
Beat at speed CONTINUOUS FAST (ON-2) for 5' (may be set from 5' to 10').
2. Heat up to 40°C (may be set from 35° to 45°) with CONTINUOUS SLOW BEATING (ON-1).
3. Add "*Milk+starch*".
Heat up to 85°C (may be set from 70° to 105°) with CONTINUOUS FAST BEATING (ON-2).
4. Add "*cream*".
Cook with CONTINUOUS SLOW BEATING (ON-1) for 1'30", may be set from 1' to 1h.
5. Cool to 10°C at speed Slow INTERMITTENT for 5" On and 50" off.
6. From this point onwards it is possible to enable product extraction by pressing the  button.
Cool to 4°C without beating (OFF).
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
7. Store at 4°C (may be set from 1° to 4°) without beating (OFF) for an indefinite amount of time.
It is possible to set any type of beating.

3.5.4 Program n° 4 Chocolate Custard


1. Add "*Yolks+1/2 Sugar*".
Beat at speed CONTINUOUS FAST (ON-2) for 5' (may be set from 5' to 10').
2. Add "*Eggs+1/2 Sugar*".
Beat at speed CONTINUOUS FAST (ON-2) for 1'.
3. Add "*Starch/Cocoa*".
Beat at speed CONTINUOUS FAST (ON-2) for 1'.
4. Add "*Milk*".
Heat up to 85°C (may be set from 70° to 100°) with CONTINUOUS SLOW BEATING (ON-1).
5. Add "*Chocolate*".
Cook with CONTINUOUS SLOW BEATING (ON-1) for 1', may be set from 1' to 5'.
6. Cool for 3' (may be set from 1' to 7') with CONTINUOUS FAST BEATING (ON-2).

7. Cool to 10°C (may be set from 4° to 15°) with INTERMITTENT SLOW BEATING (ON/OFF-1).
8. From this point onwards it is possible to enable product extraction by pressing the  button.
Cool to 4°C (may be set from 1° to 4°) without beating (OFF).
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
9. Store at 4°C (may be set from 1° to 4°) without beating (OFF) for an indefinite amount of time.
It is possible to set any type of beating.


3.5.5 Program n° 5 Zabaione Custard

1. Add "**Yolk+Sugar**".
Beat at speed CONTINUOUS FAST (ON-2) for 3' (may be set from 1' to 5').
2. Add "**Thick. + Marsala**".
Heat to 83° with CONTINUOUS FAST BEATING (ON-2).
3. Add "**Gelatine**".
Cool to 50° with CONTINUOUS SLOW BEATING (ON-1).
4. Cool to 15° with INTERMITTENT SLOW BEATING (ON/OFF-1).
5. From this point onwards it is possible to enable product extraction by pressing the  button.
Cool to 4° without beating (OFF).
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
6. Store at 4° without beating (OFF).
It is possible to set any type of beating.


3.5.6 Program n° 6 Lemon Cream

1. Add "**Eggs+Sugar+Starch**".
Beat at speed CONTINUOUS FAST (ON-2) for 5' (may be set from 5' to 10').
2. Add "**Lemon Juice**".
Heat up to 85°C (may be set from 70° to 105°) with CONTINUOUS SLOW BEATING (ON-1).
3. Add "**Butter**".
Cool to 70°C with CONTINUOUS SLOW BEATING (ON-1).
4. From this point onwards it is possible to enable product extraction by pressing the  button.
Cool to 25°C (may be set from 20° to 30°) with INTERMITTENT SLOW BEATING (ON/OFF-1) (programmed time settings).
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
5. The machine goes into Stop mode (all outputs are set to OFF).
It is possible to set any type of beating.


3.5.7 Program n° 7 Bavarian Cream

1. Add "**Yolk+Sugar**".
Set the speed to CONTINUOUS FAST BEATING (ON-2) for 5' (may be set from 1' to 5').
2. Add "**Milk+(Fru-Past)**".
Heat with CONTINUOUS SLOW BEATING (ON-1) to 70°C (may be set from 70° to 85°).
3. Add "**Gelatine+(Liq.)**".
Pause at the set temperature for the period of time calculated automatically with CONTINUOUS SLOW BEATING (ON-1).
4. Cool to 65°C (may be set from 60° to 70°) with CONTINUOUS SLOW BEATING (ON-1).
5. Add "**(Chocolate)**".
Cool to 20°C (may be set from 15° to 30°) with CONTINUOUS SLOW BEATING (ON-1).
6. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 20°C with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.


3.5.8 Program n° 8 Cream Pudding

1. Add "**Cream+Milk+Sug**".
Heat with CONTINUOUS FAST BEATING (ON-2) up to 90°C.
2. Add "**Gelatine**".
Pause for 5' (may be set from 1' to 5') with CONTINUOUS FAST BEATING (ON-2).
3. Cool to 20°C (may be set from 15° to 30°) with CONTINUOUS SLOW BEATING (ON-1).
4. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 20°C with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.


3.5.9 Program n° 9 Tiramisù

1. Add "**Yolk+Sugar**".
Beat at speed CONTINUOUS FAST (ON-2) for 5' (may be set from 1' to 10').
2. Add "**Starch**".
Beat at speed Slow Continuous (ON-1) for 5' (may be set from 1' to 10').
3. Add "**Marsala+Coffee**".
Heat with CONTINUOUS FAST BEATING (ON-2) up to 88°C (may be set from 80° to 95°).
4. Cool with CONTINUOUS FAST BEATING (ON-2) to 35°C (may be set from 30° to 40°).
5. Add "**Mascarp.+Sug.**".
Pause with CONTINUOUS SLOW BEATING (ON-1) for 30' (may be set from 10' to 30').
6. Cool with INTERMITTENT SLOW BEATING (ON/OFF-1) to 4°C (may be set from 2° to 10°).
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Store at 4° without beating (OFF). It is possible to set any type of beating.


3.5.10 Program n° 10 Chocolate Pudding

1. Add "**Milk - cream**".
Heat up to 30°C (may be set from 25° to 35°) with CONTINUOUS FAST BEATING (ON-2).
2. Add "**Sugar - Cocoa**".
Heat up to 40°C (may be set from 35° to 45°) with CONTINUOUS FAST BEATING (ON-2).
3. Add "**Amaretti**".
Heat up to 90°C (may be set from 80° to 95°) with CONTINUOUS SLOW BEATING (ON-1).
4. Add "**Gelatine**".
Cool to 25°C (may be set from 20° to 30°) with CONTINUOUS SLOW BEATING (ON-1).
5. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 25°C with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.


3.5.11 Program n° 11 Creamy Fruit

1. Add "**Fruit**".
Heat with CONTINUOUS FAST BEATING (ON-2) up to 30°C (may be set from 20° to 40°).
2. Add "**Sug+starch+Wat.**".
Heat with CONTINUOUS FAST BEATING (ON-2) up to 80°C (may be set from 75° to 95°).
3. Pause at 3' (may be set from 1' to 5') with CONTINUOUS SLOW BEATING (ON-1).
4. Cool with CONTINUOUS FAST BEATING (ON-2) to 70°C (may be set from 60° to 75°).
5. Cool to 8°C (may be set from 6° to 10°) with INTERMITTENT SLOW BEATING (ON/OFF-1) (program setting times).
6. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 8°C without beating (OFF).
It is possible to set any type of beating.


3.5.12 Program n° 12 Jam

1. Add "**Fruit+Sugar+Pect.**".
Heat with CONTINUOUS SLOW BEATING (ON-1) up to 85°C (may be set from 80° to 90°).
2. Add "**Sugar**".
Heat with CONTINUOUS SLOW BEATING (ON-1) up to 95°C (may be set from 90° to 100°).
3. Heat with CONTINUOUS SLOW BEATING (ON-1) up to 100°C (may be set from 95° to 105°).
4. Add "**Sugar/Glucose**".
Heat with CONTINUOUS SLOW BEATING (ON-1) up to 105°C (may be set from 90° to 110°).
5. Add "**Citric/Lemon**".
Pause at 105° with CONTINUOUS SLOW BEATING (ON-1) for 15' (may be set from 10' to 60').
6. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 105° with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.

3.5.13 Program n° 13 Pochee Fruit


1. Add "**Frozen Fruit**".
Heat without beating (OFF) for 15' (may be set from 5' to 30').
2. Add "**Sugar +Fruit**".
Heat up to 52°C with INTERMITTENT SLOW BEATING (ON/OFF-1).
3. Pause at 52°C for 6h (may be set from 3h to 15h) with INTERMITTENT SLOW BEATING (ON/OFF-1) 10" ON and 30" OFF.
4. Heat to 65°C with INTERMITTENT SLOW BEATING (ON/OFF-1) 10" ON and 3' OFF.
5. Pause at 65°C for 30' with INTERMITTENT SLOW BEATING (ON/OFF-1) 10" ON and 30' OFF.
6. Cool to 4°C with INTERMITTENT SLOW BEATING (ON/OFF-1) 10" ON and 3' OFF.
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Store at 4°C without beating (OFF). It is possible to step up the beating.
It is possible to set any type of beating

3.5.14 Program n° 14 Fruit Topping


1. Add "**Water+Fruit**".
Heat up to 30°C (may be set from 25° to 35°) with CONTINUOUS FAST BEATING (ON-2).
2. Add "**Thickner+Sugar**".
Heat up to 60°C (may be set from 55° to 65°) with CONTINUOUS SLOW BEATING (ON-1).
3. Add "**Sugar/Glucose**".
Heat up to 105°C (may be set from 90° to 105°) with CONTINUOUS SLOW BEATING (ON-1).
4. Add "**Citric Solution**".
Beat at speed Slow Continuous (ON-1).
5. Add "**Aromas**".
Cool to 30°C with CONTINUOUS SLOW BEATING (ON-1).
6. From this point onwards it is possible to enable product extraction by pressing the  button.
The machine then goes into STOP mode.
It is possible to set any type of beating.

3.5.15 Program n° 15 Fruit Jellies


1. Add "**Fruit Puree**".
Heat with CONTINUOUS SLOW BEATING (ON-1) up to 40°C (may be set from 30° to 50°).
2. Add "**Sugar+Pectine**".
Heat with CONTINUOUS SLOW BEATING (ON-1) up to 105°C (may be set from 90° to 110°).
3. Add "**Citric Solution**".
Pause at 105° with CONTINUOUS SLOW BEATING (ON-1) for 5' (may be set from 1' to 15').

4. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 105° with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.


3.5.16 Program n° 16 Gelatine for Cakes

1. Add "**Water**".
Heat up to 25°C (may be set from 20° to 30°) with CONTINUOUS FAST BEATING (ON-2).
2. Add "**1/4 Sug.+Pectine**".
Heat up to 85°C (may be set from 80° to 90°) with CONTINUOUS FAST BEATING (ON-2).
3. Add "**Sugar / Glucose**".
Heat for 1' with CONTINUOUS FAST BEATING (ON-2).
4. Add "**3/4 Sugar**".
Heat for 1' with CONTINUOUS FAST BEATING (ON-2).
5. Heat up to 105°C with CONTINUOUS SLOW BEATING (ON-1).
6. Pause at 105° with CONTINUOUS SLOW BEATING (ON-1) for 5' (may be set from 5' to 10').
7. Add "**Citric Solution**".
Beat for 1' at speed Slow Continuous (ON-1).
8. Cool to 50° (may be set from 40° to 60°) with CONTINUOUS SLOW BEATING (ON-1).
9. From this point onwards it is possible to enable product extraction by pressing the  button.
La machine then goes into STOP mode.
It is possible to set any type of beating.

3.5.17 Program n° 17 Syrup for Dessert

1. Add "**Water+Sugar**".
Heat to 90° (may be set from 90° to 100°) with CONTINUOUS SLOW BEATING (ON-1).
2. Cool to 40° (may be set from 35° to 45°) with CONTINUOUS SLOW BEATING (ON-1).
3. Add "**Flavour/Aroma**".
Cool to 15° (may be set from 10° to 20°) with CONTINUOUS SLOW BEATING (ON-1).
4. From this point onwards it is possible to enable product extraction by pressing the  button.
Cool to 4° (may be set from 1° to 4°) with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
5. Pause at 4° with INTERMITTENT SLOW BEATING (ON/OFF-1).
It is possible to set any type of beating.

3.5.18 Program n° 18 Custard Storage

1. From this point onwards it is possible to enable product extraction by pressing the  button.
Cool to 10°C (may be set from 4° to 15°) with INTERMITTENT SLOW BEATING (ON/OFF-1).
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
2. Cool to 4°C (may be set from 1° to 4°) without beating (OFF).
It is possible to set the beater speed to slow INTERMITTENT (ON/OFF-1), SLOW CONTINUOUS (on-1) or to unselect beating.
3. Store at 4°C (may be set from 1° to 4°) without beating (OFF) for an indefinite amount of time.
It is possible to set any type of beating.

NOTE:


Where these are not otherwise specified, the intermittent beater times are those set in the Cyclic Timer ON and Cyclic Timer OFF programming steps.




3.6 “ICE-CREAM” PROGRAMS

The electronic memory stores **4 basic programs**, which are fully automatic and are described below.


3.6.1 Program n° 1 High Pasteurization

1. Add “**Solids+Milk**”.
Beat at speed CONTINUOUS FAST (ON-2) for 5’ (may be set from 1’ to 10’).
2. Add “**Cream+Milk**”.
Heat up to 85°C with CONTINUOUS SLOW BEATING (ON-1).
3. Pause at 85° for 1’ with CONTINUOUS SLOW BEATING (ON-1).
4. Cool to 4°C (may be set from 2° to 4°) with CONTINUOUS SLOW BEATING (ON-1).
5. From this point onwards it is possible to enable product extraction by pressing the  button.
Once a temperature of 4° has been reached, the pause time begins, which is fundamental for the ice-cream cream. During the paused phase slow beating is activated for 10” every 30’.
It is possible to set any type of beating.


3.6.2 Program n° 2 Mix Pasteurization

1. Add “**Solids+Milk**”.
Beat at speed CONTINUOUS FAST (ON-2) for 5’ (may be set from 1’ to 10’).
2. Add “**Cream+Milk**”.
Heat up to 65°C (may be set from 65° to 95°) with CONTINUOUS SLOW BEATING (ON-1).
3. Pause at the set temperature for the automatically calculated time period with CONTINUOUS SLOW BEATING (ON-1).
4. Cool to 4°C (may be set from 2° to 4°) with CONTINUOUS SLOW BEATING (ON-1).
5. From this point onwards it is possible to enable product extraction by pressing the  button.
Once a temperature of 4° has been reached, the pause time begins, which is fundamental for the ice-cream cream. During the paused phase slow beating is activated for 10” every 30’.
It is possible to set any type of beating.

3.6.3 Program n° 3 Semifreddo Base

1. Add “**Yolks+Wat+Sug.**”.
Beat at speed CONTINUOUS FAST (ON-2).
2. Heat to 65° with CONTINUOUS FAST BEATING (ON-2).
3. Heat to 80° with CONTINUOUS SLOW BEATING (ON-1).
4. Special thermostat temperature control at 80° with CONTINUOUS SLOW BEATING (ON-1).
5. Cool to 25° with CONTINUOUS SLOW BEATING (ON-1).
6. Cool to 4° with CONTINUOUS SLOW BEATING (ON-1).
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Store at 4° with INTERMITTENT SLOW BEATING (ON/OFF-1).
It is possible to set any type of beating.

3.6.4 Program n° 4 Mix Storage

1. Cool to 4°C (may be set from 2° to 4°) with CONTINUOUS SLOW BEATING (ON-1).
2. From this point onwards it is possible to enable product extraction by pressing the  button.
Store at 4°C (may be set from 2° to 4°) with INTERMITTENT SLOW BEATING (ON/OFF-1).
It is possible to set any type of beating.

NOTE:


Where these are not otherwise specified, the intermittent beater times are those set in the Cyclic Timer ON and Cyclic Timer OFF programming steps.



3.7 “CHOCOLATE” PROGRAMS

The electronic memory stores **9 basic programs**, which are fully automatic and are described below.

3.7.1 Program n° 1 Bitter Choc.Harden


1. Add “**Chocolate**”.
Heat without beating (OFF) for 3’ (may be set from 3’ to 10’).
2. Add “**Chocolate**”.
Heat up to 48°C (may be set from 43° to 60°) with CONTINUOUS SLOW BEATING (ON-1).
3. Pause at the set temperature for 5’ (may be set from 1’ to 10’).
4. Cool intermittently to 29°C (may be set from 25° to 30°) with CONTINUOUS SLOW BEATING (ON-1).
5. Pause at 29°C for 1’ with CONTINUOUS SLOW BEATING (ON-1).
6. Heat up to 31°C (may be set from 28° to 34°).
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 31°C (may be set from 28° to 34°) with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.

NOTE

*Once it has been hardened, chocolate can be stored into the machine for 2 hours. After that time, it is advisable to take it out or set the machine to **MANUAL HEATING** up to 45°C in order to melt chocolate again and have it ready for a new hardening program, when needed.*



3.7.2 Program n° 2 Milk Choc.Harden


1. Add “**Chocolate**”.
Heat with the product at rest for 3’ (may be set from 3’ to 10’).
2. Add “**Chocolate**”.
Heat up to 43°C (may be set from 43° to 53°) with CONTINUOUS SLOW BEATING (ON-1).
3. Pause at the set temperature for 5’ (may be set from 1’ to 10’).
4. Cool intermittently to 28°C (may be set from 25° to 30°) with CONTINUOUS SLOW BEATING (ON-1).
5. Pause at 28°C for 1’ with CONTINUOUS SLOW BEATING (ON-1).
6. Heat up to 30°C (may be set from 27° to 33°).
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 31°C (may be set from 27° to 33°) with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.

NOTE

*Once it has been hardened, chocolate can be stored into the machine for 2 hours. After that time, it is advisable to take it out or set the machine to **MANUAL HEATING** up to 45°C in order to melt chocolate again and have it ready for a new hardening program, when needed.*




3.7.3 Program n° 3 White Choc. Harden

1. Add “**Chocolate**”.
Heat with product at rest for 3’ (may be set from 3’ to 10’).
2. Add “**Chocolate**”.
Heat up to 43°C (may be set from 42° to 50°) with CONTINUOUS SLOW BEATING (ON-1).
3. Pause at the set temperature for 5’ (may be set from 1’ to 10’).
4. Cool intermittently to 27°C (may be set from 24° to 29°) with CONTINUOUS SLOW BEATING (ON-1).
5. Pause at 27°C for 1’ with CONTINUOUS SLOW BEATING (ON-1).
6. Heat up to 29°C (may be set from 26° to 31°).
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 31°C (may be set from 26° to 31°) with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.

**NOTE**

*Once it has been hardened, chocolate can be stored into the machine for 2 hours. After that time, it is advisable to take it out or set the machine to **MANUAL HEATING** up to 45°C in order to melt chocolate again and have it ready for a new hardening program, when needed.*

3.7.4 Program n° 4 Gianduia Harden

1. Add "**Gianduia**".
Heat with product at rest for 3' (may be set from 3'a 10').
2. Add "**Gianduia**".
Heat up to 43°C (may be set from 43° to 53°) with CONTINUOUS SLOW BEATING (ON-1).
3. Pause at the set temperature for 5' (may be set from 1' to 10').
4. Cool intermittently to 27°C (may be set from 26° to 28°) with CONTINUOUS SLOW BEATING (ON-1).
5. Pause at 27°C for 1' with CONTINUOUS SLOW BEATING (ON-1).
6. Heat up to 29°C (may be set from 26° to 30°).
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 29°C (may be set from 26° to 30°) with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.

NOTE


*Once it has been hardened, chocolate can be stored into the machine for 2 hours. After that time, it is advisable to take it out or set the machine to **MANUAL HEATING** up to 45°C in order to melt chocolate again and have it ready for a new hardening program, when needed.*

3.7.5 Program n° 5 Speed Choc.Harden

1. Add "**Chocolate**".
Heat up to 45°C (may be set from 40° to 50°) with CONTINUOUS SLOW BEATING (ON-1).
2. Pause at the set temperature for 5' (may be set from 1' to 10').
3. Add "**Chocolate**".
Cool intermittently to 35°C (may be set from 30° to 40°) with CONTINUOUS SLOW BEATING (ON-1).
4. Pause at 35°C for 1' with CONTINUOUS SLOW BEATING (ON-1).
5. Add "**Butter**". Pause at 35°C with CONTINUOUS SLOW BEATING (ON-1) until the ingredient addition has been confirmed.


WARNING

In order for the process to be successful, butter must be added.
For this reason the machine emits a sound continuously and remains paused until the user confirms that the ingredient has been added by pressing the OK button.


6. Cool intermittently to 31°C (may be set from 28° to 32°) with CONTINUOUS SLOW BEATING (ON-1).
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 31°C (may be set from 28° to 32°) with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.

3.7.6 Program n° 6 Ganache Cream


1. Add "**cream**".
Heat up to 30°C (may be set from 25° to 30°) with CONTINUOUS FAST BEATING (ON-2).
2. Add "**Glucose**".
Heat up to 85°C with CONTINUOUS FAST BEATING (ON-2).
3. Cool to 75° with CONTINUOUS FAST BEATING (ON-2).
4. Add "**Butter**".
Cool to 50° with CONTINUOUS FAST BEATING (ON-2).
5. Add "**Butter**".
Cool to 40°C with CONTINUOUS SLOW BEATING (ON-1).
4. Add "**Butter**" and "(Butt)(Alcohol)".
Cool to 30°C with CONTINUOUS SLOW BEATING (ON-1).

6. From this point onwards it is possible to enable product extraction by pressing the  button.
The machine then goes into Stop mode.
It is possible to set any type of beating.

3.7.7 Program n° 7 Chocolate Sauce

1. Add "**Water**".
Heat to 30° (may be set from 25° to 35°) with CONTINUOUS FAST BEATING (ON-2).
 2. Add "**Cocoa+Sugar**".
Heat to 60° (may be set from 55° to 65°) with CONTINUOUS FAST BEATING (ON-2).
 3. Add "**Glucose**".
Heat to 95° (may be set from 90° to 95°) with CONTINUOUS SLOW BEATING (ON-1).
 4. Add "**Chocolate**".
Keep the product thermostat-controlled at 95° with CONTINUOUS FAST BEATING (ON-2).
 5. Cool to 15° with CONTINUOUS SLOW BEATING (ON-1).
 6. Cool to 4° with CONTINUOUS SLOW BEATING (ON-1).
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Store at 4° with INTERMITTENT SLOW BEATING (ON/OFF-1).
It is possible to set any type of beating.

3.7.8 Program n° 8 Chocolate Spread

1. Add "**Chocolate**".
Heat for 3' (may be set from 2' to 10') without beating (OFF).
 2. Add "**Cocoa**".
Heat to 45° (may be set from 40° to 50°) with CONTINUOUS SLOW BEATING (ON-1).
 3. Add "**Oil**".
Keep the product thermostat-controlled at 45° with CONTINUOUS SLOW BEATING (ON-1).
 5. Add "**Paste Gelato**".
Cool to 26° (may be set from 24° to 28°) with CONTINUOUS SLOW BEATING (ON-1).
6. From this point onwards it is possible to enable product extraction by pressing the  button.
The machine then goes into STOP mode. It is possible to set any type of beating.

3.7.9 Program n° 9 Harden. Storage

1. Pause at 30° (may be set from 0° to 99°) at speed CONTINUOUS (ON-1) for the entire cycle.
This program is used ONLY when the temperature cycle has been completed; the chocolate was in storage and the Pastochef RTL was unintentionally turned off by pressing the STOP button.

NOTE:

Where these are not otherwise specified, the intermittent beater times are those set in the Cyclic Timer ON and Cyclic Timer OFF programming steps.




3.8 "SPECIALTY" PROGRAMS


The electronic memory stores **7 basic programs**, which are fully automatic and are described below.

3.8.1 Program n° 1 Cream Puffs


1. Add "**Water+Salt+Milk**".
Heat to 100°C (may be set from 90° to 110°) with CONTINUOUS SLOW BEATING (ON-1).
2. Add "**Flower**".
Pause for 8' (may be set from 3' to 15') with CONTINUOUS SLOW BEATING (ON-1).
3. Cool with CONTINUOUS FAST BEATING (ON-2) to 60°C.
4. Add "**Eggs**".
Pause with CONTINUOUS FAST BEATING (ON-2) for 10' (may be set from 3' a 15').
5. Cool with CONTINUOUS SLOW BEATING (ON-1) to 40°C (may be set from 40° to 50°).

6. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.


3.8.2 Program n° 2 Brutti ma Buoni

1. Add "*WhipWhiteEggs*".
Beat for 1' at speed Slow Continuous (ON-1).
 2. Add "*Sugar*".
Heat to 30° (may be set from 25° to 35°) with CONTINUOUS SLOW BEATING (ON-1).
 3. Add "*Nuts Nibs*".
Heat to 90° (may be set from 85° to 95°) with CONTINUOUS SLOW BEATING (ON-1).
 5. Keep the product thermostat-controlled at 90° with CONTINUOUS SLOW BEATING (ON-1).
 6. Cool to 80° (may be set from 70° to 80°) without a speed setting (OFF).
7. From this point onwards it is possible to enable product extraction by pressing the  button.
The machine then goes into Stop mode.
It is possible to set any type of beating.


3.8.3 Program n° 3 Honey Almond Noug.

1. Add "*Honey*".
Heat to 60° (may be set from 55° to 65°) with CONTINUOUS FAST BEATING (ON-2).
 2. Add "*Candied fruit*".
Heat to 95° (may be set from 90° to 100°) with CONTINUOUS FAST BEATING (ON-2).
 3. Add "*Almonds*".
Heat to 105° (may be set from 100° to 110°) with CONTINUOUS SLOW BEATING (ON-1).
 4. Keep the product thermostat-controlled at 105° without beating (OFF).
 5. Cool to 80° (may be set from 70° to 90°) with CONTINUOUS SLOW BEATING (ON-1).
6. From this point onwards it is possible to enable product extraction by pressing the  button.
The machine then goes into Stop mode.
It is possible to set any type of beating.


3.8.4 Program n° 4 Petit Four

1. Add "*WhipWhites+Sug*".
Heat to 30° with CONTINUOUS SLOW BEATING (ON-1).
 2. Add "*Almond flour*".
Heat to 35° with CONTINUOUS SLOW BEATING (ON-1).
 3. Add "*Bicarbonate*".
Heat to 50° (may be set from 50° to 95°) with CONTINUOUS SLOW BEATING (ON-1).
 4. Cool to 40° (may be set from 35° to 55°) with CONTINUOUS SLOW BEATING (ON-1).
5. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 40° with INTERMITTENT SLOW BEATING (ON/OFF-1).
It is possible to set any type of beating.


3.8.5 Program n° 5 Butter Cookies

1. Add "*Butter+Sugar*".
Heat to 30° with CONTINUOUS FAST BEATING (ON-2).
 2. Cool to 28° (may be set from 26° to 28°) with CONTINUOUS FAST BEATING (ON-2).
 3. Add "*Eggs*".
Pause with CONTINUOUS FAST BEATING (ON-2) to 28°C for 5' (may be set from 1' to 10').
 4. Cool to 25° (may be set from 20° to 25°) with CONTINUOUS FAST BEATING (ON-2).
 5. Add "*Flour*".
Pause at 25° with CONTINUOUS SLOW BEATING (ON-1).
6. From this point onwards it is possible to enable product extraction by pressing the  button.
The machine then goes into Stop mode.
It is possible to set any type of beating.

3.8.6 Program n° 6 Frittelle

1. Add "**Salt+Water+Milk**".
Heat for 1' with CONTINUOUS SLOW BEATING (ON-1).
2. Add "**Butter**".
Heat to 85°C (may be set from 80° to 100°) with CONTINUOUS FAST BEATING (ON-2).
3. Add "**Flour**".
Pause for 8' (may be set from 3' to 15') with CONTINUOUS FAST BEATING (ON-2).
4. Cool with CONTINUOUS FAST BEATING (ON-2) to 60°C.
5. Add "**Eggs**".
Pause with CONTINUOUS SLOW BEATING (ON-1) for 10' (may be set from 3' to 15').
6. Cool with CONTINUOUS SLOW BEATING (ON-1) to 40°C (may be set from 40° to 50°).
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause with CONTINUOUS SLOW BEATING (ON-1).
It is possible to set any type of beating.

3.8.7 Program n° 7 Yoghourt

1. Add "**Milk**".
Heat to 90°C (may be set from 85° to 95°) with CONTINUOUS SLOW BEATING (ON-1).
2. Pause for 15' (may be set from 1' to 20') with CONTINUOUS SLOW BEATING (ON-1).
3. Cool with CONTINUOUS SLOW BEATING (ON-1) to 42°C.
4. Add "**Milk+cream**".
Pause with CONTINUOUS FAST BEATING (ON-2) for 3'.
5. Pause without beating (OFF) for 4h (may be set from 1h to 10h).
6. Cool without beating (OFF) to 4°C.
7. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause without beating (OFF) at 4°C.
It is possible to set any type of beating.

NOTE:


Where these are not otherwise specified, the intermittent beater times are those set in the Cyclic Timer ON and Cyclic Timer OFF programming steps.



3.9 "GASTRONOMY" PROGRAMS


The electronic memory stores **7 basic programs**, which are fully automatic and are described below.

3.9.1 Program n° 1 Gastron. Cream


1. Add "**Butter + Salt**".
Heat with CONTINUOUS FAST BEATING (ON-2) up to 32°C (may be set from 25° to 35°).
2. Add "**Starch+Water+Milk**".
Heat with CONTINUOUS SLOW BEATING (ON-1) up to 82°C (may be set from 80° to 90°).
3. Cool with CONTINUOUS FAST BEATING (ON-2) to 76°C (may be set from 70° to 80°).
4. Cool with INTERMITTENT SLOW BEATING (ON/OFF-1) to 20°C (may be set from 15° to 55°).
5. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 20°C with INTERMITTENT SLOW BEATING (ON/OFF-1).
It is possible to set any type of beating.

3.9.2 Program n° 2 Bechamel


1. Add "**Butter**".
Heat with CONTINUOUS FAST BEATING (ON-2) up to 65°C (may be set from 60° to 70°).

2. Add "**Flour**".
Heat with CONTINUOUS FAST BEATING (ON-2) up to 90°C (may be set from 80° to 100°).
3. Pause at 90°C for 3' (may be set from 1' to 5') with CONTINUOUS SLOW BEATING (ON-1).
4. Add "**Milk**".
Cool with CONTINUOUS FAST BEATING (ON-2) to 84°C.
5. Heat with CONTINUOUS FAST BEATING (ON-2) up to 85°C.
6. Add "**Nutmeg+Salt**".
Pause with CONTINUOUS FAST BEATING (ON-2) for 10' (may be set from 1' to 15').
7. Cool with INTERMITTENT SLOW BEATING (ON/OFF-1) up to 10°C (may be set from 5° to 20°).
8. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause with INTERMITTENT SLOW BEATING (ON/OFF-1).
It is possible to set any type of beating.


3.9.3 Program n° 3 Sal. Shortbread

1. Add "**Butter**".
Heat with CONTINUOUS FAST BEATING (ON-2) up to 30°C (may be set from 25° to 40°).
2. Add "**Cheese**".
Cool with CONTINUOUS FAST BEATING (ON-2) to 28°C (may be set from 20° to 35°).
3. Add "**Eggs**".
Pause with CONTINUOUS FAST BEATING (ON-2) to 28°C for 5' (may be set from 1' to 10').
4. Cool with CONTINUOUS FAST BEATING (ON-2) up to 25°C (may be set from 20° to 30°).
5. From this point onwards it is possible to enable product extraction by pressing the  button.
Add "**Flour**".
Pause with CONTINUOUS SLOW BEATING (ON-1) for 5' (may be set from 3' to 10') then switch to Stop mode.
It is possible to set any type of beating.

3.9.4 Program n° 4 Poslow

1. Add "**Water+Salt**".
Beat at speed CONTINUOUS FAST (ON-2) for 3' (may be set from 1' to 10').
2. Heat with CONTINUOUS FAST BEATING (ON-2) up to 100°C (may be set from 90° to 110°).
3. Add "**Flour**".
Pause with CONTINUOUS FAST BEATING (ON-2) to 100°C for 40' (may be set from 10' to 60').
4. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause with CONTINUOUS FAST BEATING (ON-2).
It is possible to set any type of beating.


3.9.5 Program n° 5 Italian Ragout

1. Add "**Butt.+Vegetabl.**".
Heat with CONTINUOUS FAST BEATING (ON-2) up to 95°C (may be set from 85° to 105°).
2. Add "**Meat + Bacon**".
Pause with CONTINUOUS FAST BEATING (ON-2) for 3' (may be set from 1' to 5').
3. Heat with CONTINUOUS FAST BEATING (ON-2) up to 100°C (may be set from 90° to 110°).
4. Pause with CONTINUOUS FAST BEATING (ON-2) for 10' (may be set from 1' to 15').
5. Add "**Wine + Marsala**".
Pause with CONTINUOUS FAST BEATING (ON-2) for 3' (may be set from 1' to 5').
6. Add "**Broth+Tom.Sauce**".
Pause with CONTINUOUS SLOW BEATING (ON-1) for 2h (may be set from 1h to 4h).
7. Cool with INTERMITTENT SLOW BEATING (ON/OFF-1) to 4°C.
8. From this point onwards it is possible to enable product extraction by pressing the  button.
Store without beating (OFF) at 4°C.
It is possible to set any type of beating.

3.9.6 Program n° 6 Rice

1. Heat with CONTINUOUS SLOW BEATING (ON-1) up to 92°C (may be set from 90° to 95°).
2. Pause with INTERMITTENT SLOW BEATING (ON/OFF-1) for 30' (may be set from 20' to 40').
3. Cool to 10°C (may be set from 8° to 15°). While cooling SLOW BEATING is activated for 5" every 5'.
4. Once the temperature setting of 10°C, which may be set from 8°C to 15°C, is reached, the machine goes into STOP mode.

3.9.7 Program n° 7 Fresh Cheese


1. Add "Milk".
Heat to 30° with CONTINUOUS SLOW BEATING (ON-1).
2. Add "Cream".
Heat to 40° with CONTINUOUS SLOW BEATING (ON-1).
3. Add "Curd/Ferments".
Pause at 40° without beating (OFF).
4. Cool to 4° with CONTINUOUS SLOW BEATING (ON-1).
5. From this point onwards it is possible to enable product extraction by pressing the  button.
Pause at 4° with INTERMITTENT SLOW BEATING (ON/OFF-1).
It is possible to set any type of beating.

NOTE:

Where these are not otherwise specified, the intermittent beater times are those set in the Cyclic Timer ON and Cyclic Timer OFF programming steps.




3.10 USER PROGRAMS


When the User Programs button  is pressed, a menu appears with programs which may be configured by the user.



3.10.1 Setting up a User Program

To select a cycle press the  button and scroll down the menu using the **INCREMENT** and **DECREMENT** buttons, and position the asterisk next to a program which is available.
If the program is available the program name is followed by "OK?", and if the program has already been configured the program is followed by just "OK". E.g.: in the following figure the only available program is program No.2.

	PROGRAM N. 1	OK
*	PROGRAM N. 2	OK?
	PROGRAM N. 3	OK
	PROGRAM N. 4	OK

Press the OK  button, to start the configuration. The display then shows:

*	HEATING
	COOLING
	MIXING

Position the cursor on the type of Function to be inserted as the first step of the Recipe and press the OK button.

1	HEATING
*	Temperature +085
	Speed ON-1

The display the shows:

- The recipe step number and function type on the first row;
- The target temperature on the second row;
- The phase duration on the third row;
- The speed on the fourth row.

Only those parameters which may be modified are visible.

Position the asterisk next to the parameter to be modified using the Increment and Decrement buttons

Press OK to modify the parameter value. The asterisk starts to blink.

Select the value using the **INCREMENT** and **DECREMENT** buttons.

Press OK to confirm. The asterisk stops blinking and is then located on the next parameter which may be modified. Press OK for 3" OK to save the step.

The display shows the functions which may be selected for the next step. After a Cool or Heat phase, one may also add a Pause phase.

* HEATING
COOLING
MIXING
PAUSE

Position the cursor on the type of Function to be added as the first step in the Recipe and press the **OK** button.


When the Pause phase is selected, the display shows the following:

2 PAUSE
* Temperature +085
Timer 00:30:00
Speed ON-1

Proceed to configuring the steps as described above.

In this case the Temperature setting is automatically set to the Temperature setting of the previous phase.

By setting the Pause Timer to 0, an infinite phase is set. In this case the machine recognizes the end of the recipe by pressing the **OK** button for a prolonged interval.

Upon pressing the  button while viewing the function selection screen or by pressing the **OK** button for 3" after having added an infinite pause, the display shows the following:

SAVE ?
YES ? (OK)
NO ? (STOP)

The following message appears after pressing the OK button:

PROGRAM SAVED

The program is saved and the machine goes into Stop mode.

By pressing the **STOP** button the user returns to the recipe configuration screen:

- if the last step added was an infinite pause, the parameter configuration screen for the last step is shown so that the phase duration may be modified;
- is the last step added was NOT an infinite pause, the screen for the addition of a new step is shown.

By pressing the **STOP** button while configuring the recipe, the user exits the recipe configuration screen without saving the program.

A maximum of 9 steps may be inserted in a recipe. If this limit is exceeded, the display shows the “STEPS FULL” message and the machine goes back into Stop mode.

NOTE:

- A Pause (Pause or Beating) with a duration of 0' is equivalent to an infinite pause speed:
- OFF: Beating OFF.
- ON/OFF-1: intermittent slow beating is intermittent as per the on/off times set out in the table.
- ON-1: continuous slow beating.
- ON/OFF-2: intermittent fast beating times are as per the on/off times set out in the table.
- ON-2: continuous fast beating.



3.10.2 Selecting a User Program



In order to select a program press the button and scroll down the menu with the Increment and Decrement buttons, positioning the asterisk next to the configured program to be executed.

	PROGRAM N. 1	OK?
	PROGRAM N. 2	OK
*	PROGRAM N. 3	OK
	PROGRAM N. 4	OK?

Press the **OK** button to run the program.

The display shows the following:

PROGRAM N. 1
Heating
+85°C +27°C

The display then shows:

- the program being run on the first row;
- the current phase type (or other messages) on the third row;
- on the fourth row: the target temperature to the left, the product temperature to the right, and in the middle either the increasing or decreasing temperature curve, or the date if paused.



By pressing the button the various parameter modification screens are shown for the program. Those parameters which may be modified may be changed using the **INCREMENT** and **DECREMENT** buttons.



The first time the button is pressed, the following screen shall be displayed:

PROGRAM N. 1
Heating
Temperature +085

The target temperature may be modified (when applicable) on this screen (set to 85°C in the figure), using the **INCREMENT** and **DECREMENT** buttons.



The next time the button is pressed, the following screen is displayed:

PROGRAM N. 1
Heating
Speed ON -2

The beating speed may be modified (where applicable) on this screen (CONTINUOUS FAST BEATING is shown in the figure) by using the **INCREMENT** and **DECREMENT** buttons.



The third time the button is pressed, the following screen is displayed:

PROGRAM N. 1	
Heating	
Timer	00:00:00

A pause duration (where applicable) may be modified on this screen (set to 0 in the figure since it is a temperature phase), using the **INCREMENT** and **DECREMENT** buttons.

The user returns automatically from the parameter modification screens to the main menu after 10" of inactivity.

3.10.3 Deleting User Programs



To select a cycle the user must press the button and scroll down the menu with the **INCREMENT** and **DECREMENT** buttons, positioning the asterisk next to the configured program.

If the program has been configured the name is followed by "OK". For example, programs 1, 3 and 4 in the figure have been configured.

*	PROGRAM N. 1	OK
	PROGRAM N. 2	OK?
	PROGRAM N. 3	OK
	PROGRAM N. 4	OK



Press the button for 3" in order to delete the program.

The display then shows the following message:

ERASE?	(OK)
CANCEL?	(STOP)

Upon pressing the **OK** Button the program is deleted and the User Program menu is shown again.

If the **STOP** Button is pressed the deletion is not carried out and the User Program menu is shown again.

3.10.4 Deleting all User Programs



In Stop mode, press the button for 3".

The display then shows the following message:

ERASE?	(OK)
CANCEL?	(STOP)

if no button is pressed for 10", or if the **STOP** button is pressed, the machine goes back into Stop mode. If the **OK** button is pressed, the display shows the following:

PROGRAM ERASED

3.11 VIEWING PROGRAMS (EITHER AUTOMATIC OR USER PROGRAMS)

Select an automatic cycle or a configured user program, positioning the asterisk next to a program to be viewed.



Press the **OK** button for 3" to view the program.

Following these steps, the user may view all the steps in a procedure without executing it.
For example: High Pasteurization:

1	HEATING
*	Temperature +040
Timer	00:00:00
Speed	ON-1

For each step in the recipe, the display shows:

- the step number and function on the first row;
- the temperature setting on the second row;
- the phase duration on the third row;
- the beater speed on the fourth row.

When viewing the various steps, the temperature, time and beating mode values may be modified using the **INCREMENT** and **DECREMENT** Buttons (an "*" appears next to parameters if their values may be modified).

Position the asterisk next to the parameter to be modified using the **INCREMENT** and **DECREMENT** buttons, and press **OK** to modify the value. The asterisk starts to blink.

Select the value using the **INCREMENT** and **DECREMENT** Buttons

Press the **OK** button to confirm. The asterisk stops blinking and moves to the next parameter which may be modified.

Press the **OK** button for 3" to save the step and view next one.

The modified value is saved.

When viewing the last step in the recipe, pressing the **OK** Button for 3" will bring the machine into Stop mode and the "PROGRAM END" message will be shown.

3.12 TURNING ON THE MACHINE

After washing, sanitizing and thoroughly rinsing before the first use, as described in section 5 CLEANING, pour the intended amount of mix, respecting the minimum and maximum amounts given in the table in Section 1, into the tank.

Before pouring the mix, check that the product release tap is properly closed.

NOTE:

The machine does not function when the tank cover is open or isn't completely closed.

At this stage, there are two possible functioning modes for the machine:

3.12.1 Automatic operation

The pasteurizer program cycle, using AUTOMATIC and USER PROGRAMS, is started beginning in **STOP** mode (LED is on).

- Press the button for the intended program (Custard, Ice-Cream, Chocolate, Specialties, Gastronomy, User): the name of the program which was last used appears on the display.
- Select the intended type of program, using the "**INCREMENT**" and "**DECREMENT**" buttons.
- Press the "**OK**" button to confirm and to start the cycle.
- The program ends when the "**OK**" message appears on screen, followed by the name of the executed cycle.

3.12.2 Manual operation



The **PASTOCHEF RTL** produces many other specialties which require heating, cooking, cooling, storage, mixing, stirring, etc. The machine, when using its manual functions, allows the user to follow, precisely and hygienically, any recipe.

The manual cycle is started with the machine in **STOP** mode (LED is on)

- Press the **Mixing** button and, using the "**INCREMENT**" and "**DECREMENT**" buttons, select the intended manual function to be executed (beating, heating, cooling).
- The function thus executed ends when the "**STOP**" button is pressed.




3.13 USER PROGRAMMING

To access the User Programming mode, the user must simultaneously press the Stop  and Decrement  buttons and release them immediately.

The display shows the “Manager Menu” message on the second row, and the software version “SW PastochefTC02” on the third row, followed by:

Hour	
Step U01	15

Modify the time setting using the Increment  and Decrement  keys if necessary.

Press Stop , the steps which may be modified will then appear sequentially by using the Increment and Decrement buttons.

- hours;
- minutes;
- day of the week;
- day of the month;
- month;
- year;
- language;
- cyclic timer ON;
- cyclic timer OFF;
- timer Backlight.

Cyclic Timer ON (sec):

During mix storage, at this step the beater is activated for a configurable amount of time with a typical duration of 15 seconds.


Cyclic Timer OFF (min:sec):

During mix storage, the beater is activated for the amount of time set in step 1, and stops for an amount of time configurable for this step, with a typical duration of 25 seconds.

Timer Back Light (min):

After 3' of inactivity in a hardening phase, the display backlight is turned off. To turn it back ON press the OK Button.

To exit the User programming mode wait for about 30" without pressing any buttons or press

the Mixing  button in order to break and exit.
The modified values are saved automatically.

4. SECURITY MEASURES

4.1 MACHINE SECURITY DEVICES

The **Pastochef RTL** is equipped with a range of security devices to safeguard the security of personnel and of the machine. Every security device activation entails a corresponding alarm warning on the control panel display.



When the machine is in STOP mode, the alarm is shown on the fourth row of the display. E.g.:

STOP
Compressor thermal



To delete the message once the alarm has been reset, press the Decrement .

If the alarm isn't reset then, this means that the alarm is still active.

Alarms List:

Display	Description
Slow beater thermal	Slow beater thermal relay activation When the slow beater thermal relay is activated the machine goes into STOP mode and the "Overload RTL" message appears on the display.
Fast beater thermal	Fast beater thermal relay activation When the fast beater thermal relay is activated the machine goes into STOP mode and the "Overload RTV" message appears on the display.
Compressor thermal	Compressor thermal relay activation When the compressor thermal relay is activated the machine goes into STOP mode and the "Overload RTC" message appears on the display."
Pressure Switch	Pressure Switch activation The activation of this alarm causes the compressor to stop and to then restart automatically. If the pressure switch is activated 3 times consecutively, or if it is in the open state for a single duration of 2 minutes, the machine goes into STOP mode. The "Pressure Switch" message appears on the display. Check the entry and exit water pipes and that the water circulates freely when the compressor is working. For air-cooled machines it should be verified that the condenser fan is working when the compressor is on, or that the air condenser isn't blocked; if this is the case, clean it with compressed air.
Alarm TEV Probe	" TEV "temperature probe interrupted or short-circuited. The display shows the message "Alarm TEV Probe" and the machine goes into Stop mode.
Alarm TEC probe	"TEC" temperature probe in short-circuit. The display shows the message "Alarm TEC probe". The machine goes into STOP mode.
Alarm TGEV	"TGEV" temperature probe in short-circuit. The display shows the message "Alarm TGEV" and the machine remains in the currently executed function. With this alarm, the machine must only be used temporarily.
Cover open	Tank cover open. Whenever the tank cover is open while the machine is active, the machine stops immediately and the "Cover Open" message is shown on the display. The machine restarts only when the tank cover is closed again. When the cover is closed again the alarm disappears from the display. If there is a timer, it stops when the cover is opened,, and it restarts again when the cover is closed again.
Cover open	(No message displayed) During hardening the Reg. Autom. message, followed by the product temperature value is saved every hour. The message is saved in the machine event log.
Service	It is recommended that the machine be serviced in order to maintain the efficiency and optimal performance of the machine. Contact the authorized technical support centre.



Restart cycle BLK	In the event of a black-out during a pasteurizing cycle which may have affected the mix, the cycle is repeated from the beginning. Press the decrement button to delete this message.
Cooling blackout	It is recommended that the product be checked in order to verify that black-out which has taken place during the program has not affected the product. Press the decrement key to delete this message.

4.2 POWER OUTAGES

In the event of temporary power outages:

- in Stop or Beating mode, the machine restarts in Stop mode once the power is back;
- if the power outage takes place during an automatic cycle, once the power is back, the machine, using the appropriate parameters, determines if the product may or not have been affected by the outage.

In the first instance, if the current cycle was a pasteurization, it is repeated from the beginning and the display shows the message "Restart Cycle-BLK"; the other cycle types are restarted where they were interrupted and the display shows the message "Cooling Blackout" to warn the user to check that the product is OK.

In the second instance, the cycle restarts where it was interrupted without any message on the display (the "black-out" event is saved in the event log).

5. CLEANING, DISASSEMBLING AND REASSEMBLING PARTS IN CONTACT WITH THE PRPRODUCT

ATTENTION

Never put your hand into the machine, alike during production and cleaning operations. Before carrying out any maintenance operation, make sure that the machine is in "STOP" position and main switch has been cut out.



IMPORTANT

Cleanout and sanitation must be carried out at the end of every working day as a habit and with utmost care in order to guarantee the production quality in the observance of necessary healthy rules.



If dirt is left enough time to dry out, this increases the risk of stains, marks and damage to surfaces.

Removing dirt is much easier if done immediately after use and since there is also a risk that some elements containing acid or saline substances can damage the surfaces, prolonged soaking is not recommended.

WARNING

Never use solvents, alcohol, or detergents that can damage the machine parts or pollute production functional parts.



Never use powder or abrasive cleaning products, scourers or pointed tools when cleaning by hand; there is a risk of leaving the surfaces opaque or of removing or weakening the protective film on the surface, scratching it.

Never use metal or synthetic scouring pads under any circumstances to prevent any abrasion or removal of ferrous parts leading to problems of surface oxidation or weakening.

Avoid using detergents that contain chlorine or its compounds: the use of these detergents, such as bleach, ammonia, muriatic acid, decalcifying agents can attack the composition of the steel, irreparably marking it or oxidising it. Carpigiani recommends XSAN hygienic detergent as it has been checked and approved by our laboratories.

At the end of washing and before refitting any parts, always dry them with a clean, soft cloth that is suitable for use with foods; this is necessary even after a drying cycle in the dishwasher, since any type of moisture with a high mineral or chlorine content can attack metal surfaces and leave opaque traces.

WARNING

To wash the machine, Carpigiani recommends XSAN detergent/sanitizer.



The use of XSAN makes it possible to optimise the washing and sanitizing process since it eliminates two stages in the procedure (that is, one rinse and one washing stage); all in all, using XSAN saves time, making washing/sanitizing procedures easier.

5.1 HOW TO USE XSAN DETERGENT/SANITIZER

Prepare a water-based solution (at a temperature between 45 and 60°C) and XSAN at a concentration between 1 and 3%, according to water hardness.

Washing/sanitizing by soaking

- Remove larger residues by hand.
- Remove finer residues with a jet of water.
- Soak the parts to be cleaned in the XSAN solution.
- Leave the solution to act for about 10-15 minutes.
- Rinse the parts with care, using plenty of clean drinking water.






5.2 CLEANING THE OUTSIDE

Clean off all dust and the protective agent applied to the machine before shipping.
Only use water and if necessary, a mild soap-based detergent and a soft cloth.

5.3 PRELIMINARY CLEANING

Make sure that the product dispensing tap is closed; hence let water necessary to wash in the tank through the nozzle, by pressing **WATER INLETA** .

Press the **MIXING**  button, start the beating function, and leave in this state for a few minutes.

Press **"STOP"** .

Drain all water from the cylinder through the mix dispensing spigot.

Disassemble the machine by removing its parts.

5.4 DISASSEMBLING THE SPIGOT

In order to disassemble the tap, the **AA** cover must be removed, pull down pommel **B** so as to facilitate the removal of hinge **A** from notch **0**. Remove **OR**-ring **D** from drain pipe **C**.

Disassemble all other parts of the spigot.

Proceed with washing the disassembled pieces using a solution of XSAN or similar and then rinse thoroughly.

Refit the removed pieces taking care to apply a thin layer of food lubricant to the seals.

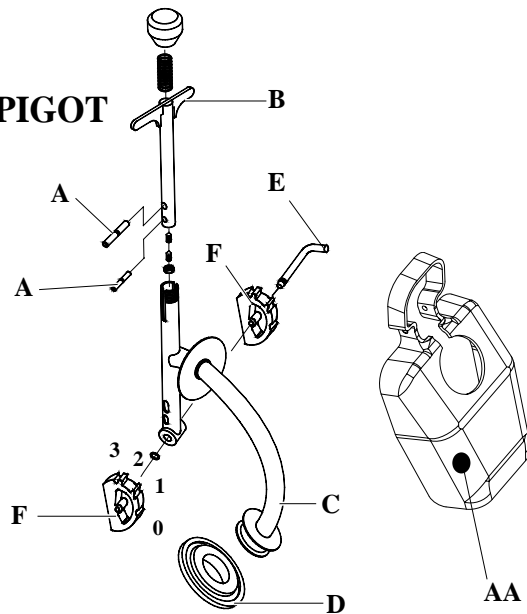


Fig. 9

5.5 DISASSEMBLING THE TANK COVER

Note:

The machine is equipped with a safety device on the cover; the machine will stop every time one lifts the cover during its operation.

In order to disassemble the upper part of the cover, remove pin **A**, whereas, to remove its lower part, withdraw lever **B** from both hinges **C** which are fixed to the machine top.

Proceed with washing the disassembled pieces using a solution of XSAN or similar and then rinse thoroughly.

Refit the removed pieces taking care to apply a thin layer of food lubricant to the seals.

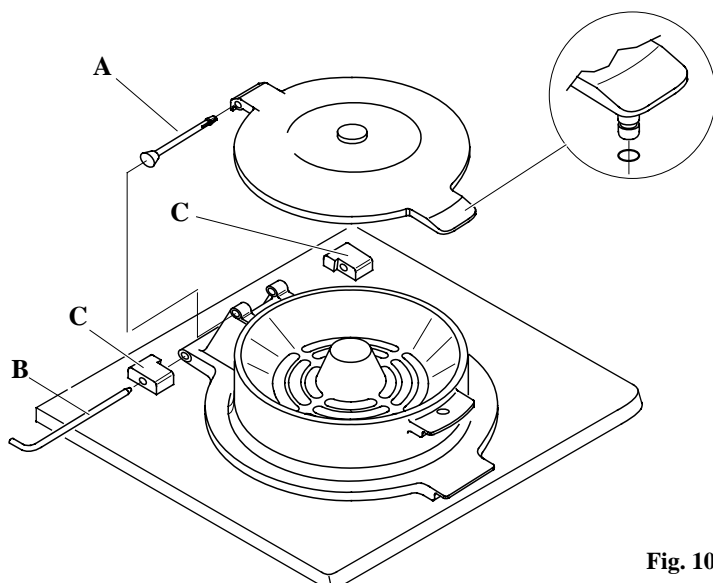


Fig. 10

5.6 DISASSEMBLING THE BEATER

Withdraw beater pin **B** and remove cover **A**.

Remove the beater by slightly pulling it up and minding blades **C** and scraping blades **D**, as they might be damaged.

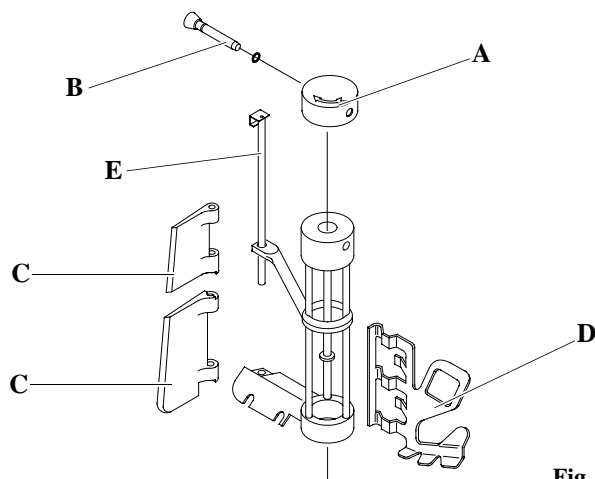


Fig. 11

WARNING

Act with utmost care: beater fall to the ground can damage it.

Remove blades **C**, sliding pin **E** and the scraping blade **D** and all other beater components.

Proceed with washing the disassembled pieces using a solution of XSAN or similar and then rinse thoroughly.

Refit the removed pieces taking care to apply a thin layer of food lubricant to the seals.

5.7 REASSEMBLING THE BEATER

To reassemble the scraping blade **D** see the picture below.

Reassemble the beater complete with its parts and place it in its seat, by getting hold of it with both hands and pushing it down.

Slip pin **B** in its seat.

IMPORTANT: Pay attention to correctly place the beater blades in their position not to affect the machine operation and to get a perfect scraping of product from tank wall.

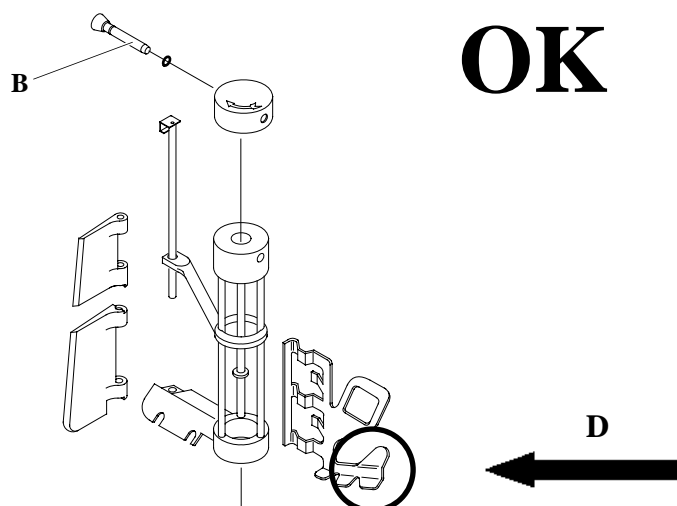


Fig. 12

5.8 HYGIENE


Mix fat contents are ideal fields for proliferation of mildew and bacteria.

To eliminate them, parts in contact with mixes and creams must be thoroughly washed and cleaned.

Stainless steel materials as well as plastic and rubber ones used for the construction of these parts and their particular design make cleaning easy, but cannot prevent the growth of mildew and bacteria if not properly cleaned.

5.9 SANITATION

With the machine at a standstill, after refitting the beater and making sure that the spigot is turned off, fill the tank with **XSAN** solution prepared in water at 45-60°C.

Press the **MIXING**  button, start the beating function and allow it to turn for about 5 minutes.

Let the **XSAN** solution act 10/15 minutes, at least.

Drain all the **XSAN** solution through the dispensing spigot.

CAUTION

Do not touch the sanitized parts with hands, napkins, or else.

WARNING

Before starting again with production, rinse thoroughly with just water, in order to remove any residue of sanitizing solution.



6 MAINTENANCE

ATTENTION

Never put your hand into the machine, alike during production and cleaning operations. Before carrying out any maintenance operation, make sure that the machine is in "STOP" position and main switch has been cut out.



6.1 SERVICING TYPOLOGY

ATTENTION

Any servicing operation requiring the opening of machine panels must be carried out with machine set to stop and disconnected from main switch!

Cleaning and lubricating moving parts is forbidden!

"Repairs to the wiring, mechanical, air supply or cooling systems, or to parts of same must be carried out by qualified personnel with permission to do so and if necessary, according to the routine and extraordinary maintenance schedules as envisaged by the customer with reference to specific intervention methods, according to the use for which the machine is destined".



Operations necessary to proper machine running are such that most of servicing is completed during the machine production cycle.

Servicing operations, such as cleaning of parts in contact with the product, disassembling of beater assembly are to be carried out at the end of a working day, so as to speed up servicing operations required.

Herebelow you can find a list of routine servicing operations:

- **Cleanout of tank and cover**
At the end of a working day.
- **Cleanout of spigot**
At the end of a working day
- **Cleanout of beater assembly**
At the end of a working day
- **Cleanout of panels**
To be carried out daily with neutral soap , seeing to it that cleansing solution never reaches beater assembly at its inside.
- **Cleanout and sanitation**
At the end of a working day, according to procedures described in section 5 of this manual.

WARNING

Never use abrasive sponges to clean machine and its parts, as it might scratch their surfaces.



6.2 WATERCOOLING

By machines with watercooled condenser, water must be drained from condenser at the end of selling season in order to avoid troubles in the event that the machine is stored in rooms where temperature may fall under 0°C.

- After closing water inlet pipe, withdraw drain pipe from its seat and let water flow out from circuit.



6.3 AIRCOOLING

Clean the air filter in order to remove dust and impurities that may hinder air circulation to the condenser. Use a brush with long bristles or a bolt of compressed air.

CAUTION!

When using compressed air, put on personal protections in order to avoid accidents; put on protective glasses!

NOTE: Never use sharp metal objects to carry out this operation. Good working of a freezing plant mostly depends on properly cleaning of the condenser.





6.4 ORDERING SPARE PARTS

In the event of breaking or wear of one or more parts, request the new ones directly to your local distributor, who will replace the part and will test the new one.

6.5 TABLE OF SPARES EQUIPMENT

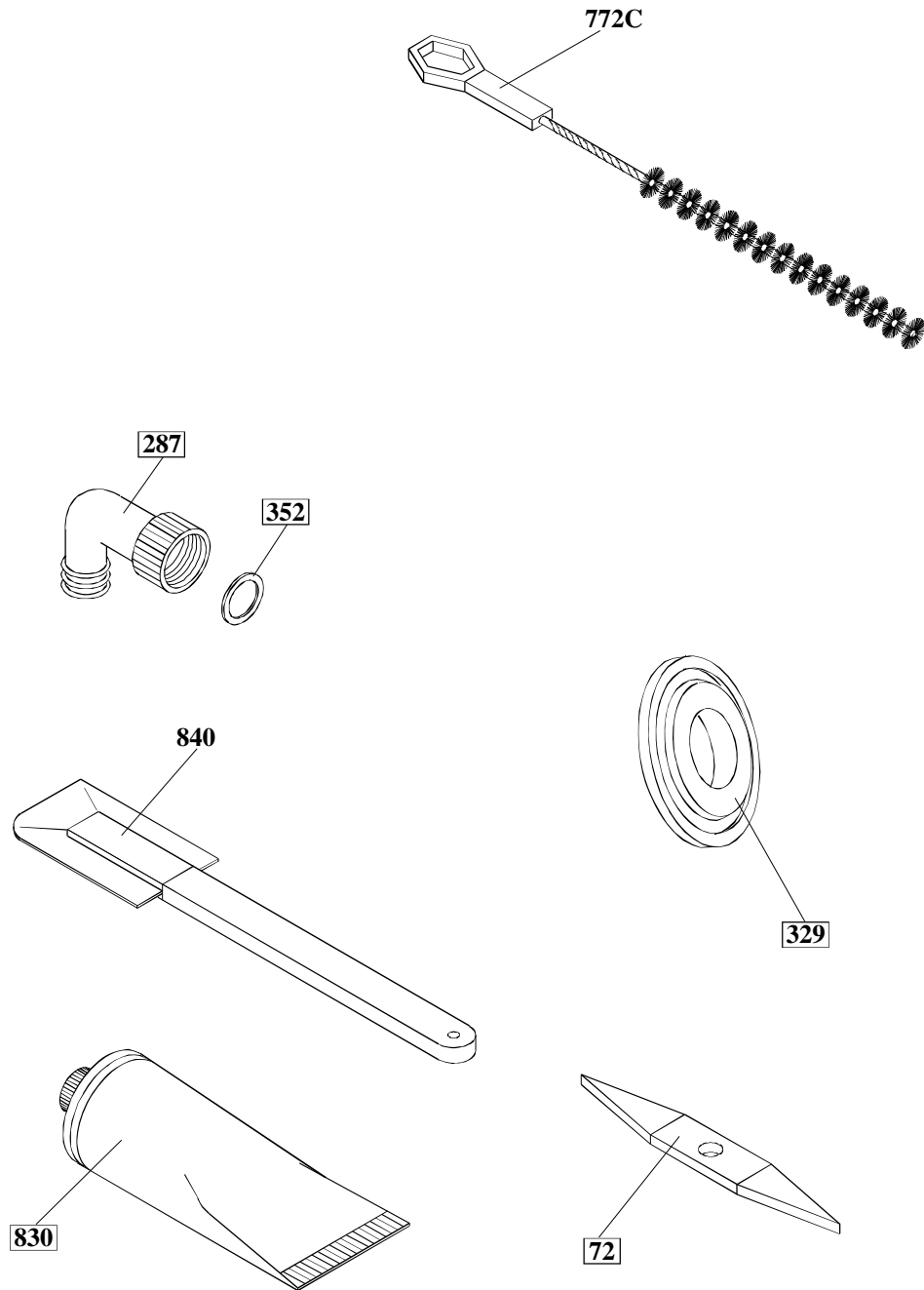


Fig. 13

ACCESS. KIT PASTOCHEF RTL

Qty.	Description	Position Nr
N°1	Special OR	329
N°1	Brush D. 40x100	772C
N°1	Edible fat	830
N°1	Carpigiani spatula	840
N°1	Rubber pipe fitting	287
N°1	Pipe fitting gasket	352
N°1	OR extractor	72

7 TROUBLESHOOT GUIDE

7.1 TROUBLESHOOT GUIDE

TROUBLE	CAUSE	CURE
Machine does not start.	The main switch is off.	Turn it on.
	Machine is unplugged.	Check and plug in.
Control unit does not accept a control.	Control unit.	Replace the control unit.
		Call after-sale service.
Product coming out from dispensing spigot.	Gasket is strained, cut, etc.	VCheck and replace through a new one
Internal noise	Gearmotor or compressor.	Call after-sale service
Bacteria testprodotta shows too high level.	Too many bacteria in the mix.	Improve preparation procedure, by sanitizing all containers, spoons, etc.
	Machine not clean and sanitized enough	Empty and clean the machine with care. Sanitize as per chapter 5.
The machine displays the service message	The hours of machine usage are such as to require servicing.	The machine may be used in the nominal way. In order to restore the machine to optimal performance, contact the authorized technical support centre.